

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[OAR-2002-0040, FRL-]

RIN 2060-A174

**National Emission Standards for Hazardous Air Pollutants:
Engine Test Cells/Stands.**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action promulgates national emission standards for hazardous air pollutants (NESHAP) for engine test cells/stands. We have identified engine test cells/stands as major sources of hazardous air pollutants (HAP) such as toluene, benzene, mixed xylenes, and 1,3-butadiene. The final NESHAP will implement section 112(d) of the Clean Air Act (CAA), which requires all major sources of HAP to meet emission standards reflecting the application of the maximum achievable control technology (MACT). The final NESHAP will protect public health by reducing exposure to air pollution.

EFFECTIVE DATE: The final rule is effective [INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]. The incorporation by reference of certain publications listed in today's final rule is approved by

the Director of the Office of the Federal Register as of [INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

ADDRESSES: Docket No. OAR-2002-0040 contains supporting documentation used in developing the final rule. The docket is located at the Air and Radiation Docket and Information Center in the EPA Docket Center, (EPA/DC) EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC and may be inspected from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays.

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SUPPLEMENTARY INFORMATION:

Regulated Entities. Subcategories and entities potentially regulated by this action include those listed in Table 1 of this preamble. In general, engine test cells/stands are covered under the Standard Industrial Classification (SIC) and North American Industrial Classification System (NAICS) codes listed in Table 1 of this preamble. However, cells/stands classified under

other SIC or NAICS codes may be subject to the final standards if they meet the applicability criteria. Not all cells/stands classified under the SIC and NAICS codes in Table 1 of this preamble will be subject to the final standards because some of the classifications cover products outside the scope of the final NESHAP for engine test cells/stands.

Table 1. Subcategories Potentially Regulated by the NESHAP for Engine Test Cells/Standards

Test Cells/Standards Used for Testing	SIC Codes	NAICS Codes
Internal Combustion Engines with rated power of 25 horsepower (hp) (19 kilowatts [kW]) or more	3531, 3519, 3523, 3559, 3599, 3621, 3711, 3714, 4226, 4512, 5541, 7538, 7539, 8299, 8711, 8731, 8734, 8741	333120, 333618, 333111, 333319, 335312, 336111, 336120, 336112, 336992, 336312, 336350, 481111, 811111, 811118, 611692, 54171, 541380
Internal Combustion Engines with rated power of less than 25 hp (19 kW)	3519, 3621, 3524, 8734	333618, 336399, 335312, 332212, 333112, 541380
Combustion Turbine Engines	3511, 3566, 3721, 3724, 4512, 4581, 7699, 9661	333611, 333612, 336411, 336412, 481111, 488190, 811310, 811411, 92711
Rocket Engines	3724, 3761, 3764, 9661, 9711	336412, 336414, 336415, 54171, 92711, 92811

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. To determine whether your engine test cell/stand is regulated by this action, you should examine the applicability criteria in §63.9285 of the final rule. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding FOR FURTHER INFORMATION CONTACT section.

Electronic Docket (E-Docket). The EPA has established an official public docket for this action under Docket ID No. OAR-2002-0040. The official public docket is the collection of materials that is available for public viewing at the EPA Docket Center (Air Docket), EPA West, Room B102, 1301 Constitution Avenue, NW, Washington, DC 20460. The Docket Center is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742. A reasonable fee may be charged for copying docket materials.

Electronic Access. An electronic version of the public docket is available through EPA's electronic public

docket and comment system, EPA Dockets. You may use EPA Dockets at <http://www.epa.gov/edocket/> to submit or view public comments, access the index of the contents of the official public docket, and access those documents in the public docket that are available electronically. Once in the system, select "search" and key in the appropriate docket identification number.

Certain types of information will not be placed in the EPA Dockets. Information claimed as confidential business information and other information whose disclosure is restricted by statute, which are not included in the official public docket, will not be available for public viewing in EPA's electronic public docket. The EPA's policy is that copyrighted material will not be placed in EPA's electronic public docket but will be available only in printed, paper form in the official public docket. Although not all docket materials may be available electronically, you may still access any of the publicly available docket materials through the docket facility identified in this document. Worldwide Web (WWW). In addition to being available in the docket, an electronic copy of today's document also will be available on the WWW. Following the

Administrator's signature, a copy of this action will be posted at www.epa.gov/ttn/oarpg on EPA's Technology Transfer Network (TTN) policy and guidance page for newly proposed or promulgated rules. The TTN provides information and technology exchange in various areas of air pollution control. If more information regarding the TTN is needed, call the TTN HELP line at (919) 541-5384.

Judicial Review. Under section 307(b)(1) of the CAA, judicial review of the final rule is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by [INSERT DATE 60 DAYS AFTER PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]. Under section 307(d)(7)(B) of the CAA, only an objection to the final rule that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Moreover, under section 307(b)(2) of the CAA, the requirements established by the final rule may not be challenged separately in any civil or criminal proceedings brought by EPA to enforce the requirements.

Outline. The information presented in this preamble is organized as follows:

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- I. National Technology Transfer and Advancement Act
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I. Background

A. What is the source of authority for development of NESHAP?

Section 112 of the CAA requires us to list categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. Engine test facilities were listed as a source category under the fuel combustion industry group, and rocket engine test firing was listed as a source category under the miscellaneous processes industry group in the Federal Register on July 16, 1992 (57 FR 31576). These two source categories were combined and renamed engine test cells/stands in the Federal Register on May 14, 2002 (67 FR 34547). Major sources of HAP are those that have the potential to emit greater than 10 tons per year (tpy) of any one HAP or 25 tpy of any combination of HAP.

B. What criteria did we use in the development of the NESHAP? Section 112 of the CAA requires that we establish NESHAP for the control of HAP from both new and existing major sources. The CAA requires the NESHAP to reflect the maximum degree of reduction in emissions of HAP that is achievable. This level of control is commonly referred to as the MACT.

The MACT floor is the minimum control level allowed for NESHAP and is defined under section 112(d)(3) of the CAA. In essence, the MACT floor ensures that the standard is set at a level that assures that all major sources achieve the level of control at least as stringent as that already achieved by the better controlled and lower emitting sources in each source category or subcategory. For new sources, the MACT standards cannot be less stringent than the emission control that is achieved in practice by the best controlled similar source. The MACT standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best performing 12 percent of existing sources in the category or subcategory (or the best performing 5 sources for categories or subcategories with fewer than 30 sources).

In developing MACT, we also consider control options that are more stringent than the floor. We may establish standards more stringent than the floor based on the consideration of cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

II. What changes and clarifications have we made to the proposed standards?

In response to the public comments received on the proposed standards, we made several changes in developing the final rule. Some of the comments and our responses and rule changes are summarized in the following sections. The complete summary of comments and responses can be found in the Response to Comments document, which is available from several sources (see SUPPLEMENTARY INFORMATION section).

A. Applicability

The final rule applies to an owner or operator of engine test cells/stands located at major sources of HAP emissions. An engine test cell/stand is any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) engines. Because the proposed rule did not include a definition of uninstalled engine, many commenters requested clarification of uninstalled engine versus installed engine testing in regards to determining applicability of the final rule.

The final rule clarifies this applicability issue. The final rule regulates the testing of engines, not the testing of any final product (e.g., automobile, boat,

power generator, etc.). If the engine being tested in a test cell/stand is not installed in, or an integrated part of, the final product, then the test cell/stand is considered part of the affected source.

This new clarification for uninstalled also clarifies the applicability of testing outboard motors. One of the comments specifically stated that outboard motors operated while detached from a boat should not be considered uninstalled, since "the engine remains coupled to lower unit gear drive and propeller without modification to its vessel-installed configuration."

In the final rule, outboard motors are considered installed when the engine is coupled with the gear drive and propeller. Therefore, a facility with engine testing involving outboard motors, in their vessel-installed configuration, is not an affected source.

Another comment stated that large diesel engines used in locomotives must drive a load in order to be accurately tested. The facility captures the work produced by the engine by driving a generator to provide the load and utilizes the electric power. The commenter wanted to assure that this type of engine testing situation also would not fall into a source category

pertaining to power production. We agree with the comment and clarify that the only applicable source category for engine test cells/stands that utilize incidentally produced power is the Engine Test Cells/Standards NESHAP.

Two other comments prompted specific applicability exclusions. One comment from the petroleum refinery industry stated that the engine test cells/stands NESHAP should not apply to petroleum refinery industry sources using knock engine testing. Because knock engines and other devices used for testing fuels and lubricants at refineries do not test the engine per se but instead test the fuels and lubricants for product quality and development purposes, these engines are not covered. The final rule specifically excludes test cells that are operated to test or evaluate fuels (such as knock engines), transmissions, electronics, etc.

Another comment involved universities with aviation programs using engine test stands for education purposes. The final rule specifically excludes research and teaching activities at major source facilities that are not engaged in the development of engines or engine test services for commercial purposes.

B. Affected Source

There were several comments requesting that the definition of affected source be revised to include all engine test cells/stands located at a major source. One commenter added that test cells/stands are typically grouped within a common building, often sharing common manifolds.

The proposed rule defined the affected source as any existing, new, or reconstructed engine test cell/stand used for testing uninstalled stationary or uninstalled mobile (motive) engines that is located at a major source of HAP emissions.

The final rule includes a revised definition of affected source in accordance with the rationale in the amended General Provisions (67 FR 16582): "A broader definition of affected source permits emission requirements to apply to a larger group of processes, activities and equipment, and may thereby facilitate more innovative and economically efficient control strategies." (67 FR 16588). The final rule defines an affected source as the collection of all equipment and activities associated with engine test cells/stands used for testing uninstalled stationary or uninstalled mobile

(motive) engines located at a major source of HAP emissions.

C. Compliance Dates

Three commenters noted a discrepancy between the language in the proposed preamble and the proposed rule concerning the compliance date.

An inadvertent error in the proposal preamble language was made. The proposal regulatory text was correct. The final rule clarifies the compliance date for existing sources as 3 years after the effective (promulgation) date, and the compliance date for new sources as the effective date or upon startup, whichever is later.

D. Reconstruction

One commenter specifically stated that movement or relocation of portable test stands within a facility should not be considered reconstruction. We do not consider movement or relocation of portable test stands (or related equipment) within a facility to be reconstruction. The revised definition of affected source in the final rule also addresses this issue.

Three commenters had ideas for specific activities to exclude from a reconstruction determination. Two

commenters recommended that EPA include a modified definition of reconstruction in the final rule that would add to the General Provisions definition in 40 CFR 63.2 an exclusion for the cost of replacement or modification of components required to demonstrate compliance with EPA's emission regulations contained in 40 CFR parts 89, 90, and 91. The commenter stated that manufacturers may be forced by regulation to invest in new equipment for test cells and fall under the definition of reconstruction in order to comply with new EPA engine requirements, even though such improvements will not change the capacity or emissions from the cell. A specific definition of reconstruction needs to be applied to engine test cells that only counts costs incurred to increase capacity or if the modification results in increased HAP emissions. The commenter further stated that EPA has previously recognized this problem and adopted a reasonable approach in the final Large Municipal Waste Combustor rule (40 CFR 60.50a(f) and 60.50b(d)), and that the same reasoning could be applied to engine test cells. Another commenter specifically recommended that EPA exclude passive measurement and control instrumentation and electronics from inclusion in

a reconstruction evaluation.

According to the recently amended General Provisions, the definition of affected source states, "Reconstruction, unless otherwise defined in a relevant standard, means the replacement of components of an affected or previously nonaffected source to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the CAA. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of HAP from that source."

Because of the diversity of engine test cells/stands and test requirements used by the various types of engine manufacturers and industry sectors, it is difficult to define what types of test equipment and support equipment comprise a new affected source (e.g. actual engine test

cell/stand) or reconstructed affected source. We cannot limit or define reconstruction to include only those changes that will increase capacity or HAP emissions associated with the engine test cell/stand because there is no way of knowing how the engine test cell/stand will be used in the future. However, we do not consider equipment reconfiguration to be reconstruction.

The regulations for Large Municipal Waste Combustors in 40 CFR 60.50a(f) and 60.50b(d) establish that physical or operational changes made to an existing unit primarily for the purpose of complying with emission guidelines under subpart Cb are not considered a modification or reconstruction. We recognize the precedent set by these provisions with respect to the exclusion of costs for required regulatory modifications to comply with other EPA regulations. We have reviewed the regulatory language in these regulations and conclude that it is appropriate to provide a similar level of flexibility to engine test cells/stands. In response to these comments, the final rule includes new language clarifying that changes made to an existing affected source primarily for the purpose of complying with revisions to engine testing requirements under 40 CFR parts 80, 86, 89, 90, 91, or 92

are not considered a modification or reconstruction. We agree with the commenter that it is appropriate to exclude existing engine test cells that are modified to meet revisions under Title 40 provisions. We believe that it is unnecessary to require these existing test cells to install emission control devices when modifications are due to changes to the federal mobile source regulations and since those improvements will not increase the capacity or the emissions from the test cell/stand. Therefore, those affected sources modified to meet revisions to requirements in those parts and subparts will not be subject to new source MACT.

The final rule also includes language that excludes passive measurement and control instrumentation and electronics from the reconstruction evaluation.

E. New Source MACT

Several commenters stated the proposed new source emissions limits (99.9 percent carbon monoxide (CO) emission reduction or 5 parts per million by volume CO outlet concentration) were too stringent or not attainable. The commenters further stated that the limits should reflect real world applications.

In the proposed rule, EPA used the best information

available at the time to determine MACT for both new and existing sources. The EPA reviewed the additional test data submitted during the comment period, as well as the various comments describing test conditions that are significantly different from those used in previously submitted test reports. The EPA also evaluated other rules requiring similar combustion control equipment. The Paper and Other Web Coating NESHAP, subpart JJJJ, has an option of meeting overall emissions reductions of 98 percent. This destruction efficiency achieved through thermal oxidation was generally accepted as the "level of control achievable on a continuous basis under all normal operating conditions applicable to new sources."

Therefore, for that particular source category (which involves coatings and cleaning solvents), EPA determined that thermal oxidation was the best control technology and justified setting the emission limits for thermal oxidizers at 98 percent control efficiency or, alternatively, achieving an outlet concentration of 20 parts per million or less.

With this control technology limit in mind, EPA compared the two source categories for similarities and/or differences that could lead to a comparable level

of destruction efficiency for engine test cells/stands.

Coating operations covered by the Paper and Other Web Coating NESHAP contain large concentrations of solvents that are easily removed through thermal oxidation.

Engine testing by-products, on the other hand, are the result (by-products) of an incomplete combustion process, and HAP are typically emitted in significantly lower concentrations than surface coating and solvent cleaning emissions. As noted by the commenters, there are a variety of fuels and test conditions used at different sources for several types of engine tests. (A summary of the submitted test reports and emissions data is included in the docket.) In reviewing the test data submitted by the commenters, we found that even though some of the test reports showed very high destruction efficiencies for thermal oxidizers, the best controlled facilities were only being required to meet 95 percent or 96 percent control volatile organic compounds (VOC), based on their operating permit requirements. These levels of control take into consideration differences in operating conditions for engine test cells/stands. After reviewing the comments and information submitted, we conclude that a maximum control level of 96 percent is appropriate once

we consider the differences in HAP emission levels from engines tested, the testing conditions, and also the need to account for measurement uncertainties. We also conclude that increased compliance flexibility will result from the use of total hydrocarbons (THC) (in addition to CO) for demonstrating compliance. Therefore, the new source emission limits have been changed in the final rule to 96 percent reduction for CO or THC based on the updated test data, additional test reports, and estimates reflecting the most prevalent engine test setups and conditions across all engine testing sectors involving engines greater than or equal to 25 horsepower (hp).

F. Monitoring Requirements

Several commenters requested that the continuous emissions monitoring systems (CEMS) requirements be eliminated or changed to parametric monitoring. The commenters stated that CEMS are too expensive and do not provide any meaningful environmental benefit to justify the capital costs to install them on engine test stands. They also pointed out that in other permitting decisions and guidance documents, EPA has determined that initial stack tests followed by monitoring of operating

temperature is a proven and cost-effective way of monitoring oxidizer performance.

The EPA reviewed the monitoring requirements in the proposal and compared them with other similar emission sources. The HAP emitted by engine test cells are the result of byproducts of incomplete combustion. Thermal destruction of these HAP occurs at temperatures between 590°C and 650°C (1,100°F and 1200°F), thus making temperature an appropriate parameter to monitor the destruction of HAP. In the case of monitoring a regenerative thermal oxidizer (RTO), the temperature is monitored during the initial performance test. After the RTO meets the performance test requirements and demonstrates compliance with the applicable emission limit, the operating temperature is continuously monitored to verify the performance of the RTO. As a result, we have concluded that parametric monitoring is adequate for ensuring compliance with the emission limit. Thus, we have changed the monitoring requirements in the final rule to allow parameter (temperature) monitoring for thermal oxidizers. Since some facilities may already have existing continuous monitoring equipment in place, CEMS are still included in the final rule as a monitoring

option.

G. Cost and Economic Assumptions and Impacts

As a result of the changes to address public comments, the final rule includes a new estimation of cost impacts. The final rule estimates there will be 18 affected source facilities at a cost of \$3.2 million and a HAP reduction of 65.5 tpy.

H. Startup, Shutdown, and Malfunction (SSM)

The proposed rule specifically required affected sources to comply with the applicable emission limitation at all times, including SSM of the engine test cells/stands. Many commenters disagreed with these provisions. One commenter requested an exclusion for the startup period during which a catalytic oxidizer comes up to operating temperature. The commenter also provided examples of issues involving oxidizer malfunctions: (1) engines cannot be shut off instantaneously, and excess emissions can occur in the time that it takes to complete an orderly and safe shutdown; and (2) there are certain tests that must be redone at large cost if they are interrupted. An example piston scuff test was described by the commenter as taking about 90 minutes, and if the engine is shutdown, the engine must be rebuilt and the

test rerun. In the case of an oxidizer malfunction when such a test is in progress, the commenter requested that the operator be able to complete the test without risk of enforcement action.

The majority of emissions from engine testing occur during the times that would be covered by SSM provisions. Therefore, to ensure that those emissions are controlled, the SSM provisions were excluded from the proposed rule. Because the SSM provisions apply to the process as well as the control equipment, the impact of the engine test NESHAP to minimize HAP emissions would be significantly reduced by adopting the SSM provisions.

Based on the comments, the final rule includes SSM provisions for any control equipment and monitoring equipment related to new or reconstructed affected source emissions. The new language references the General Provisions for SSM procedures related to control equipment. The time required for a catalytic oxidizer to come up to operating temperature is not covered by the SSM provisions because engine testing should not be conducted before the minimum operating temperature (determined during the initial performance test) is achieved.

I. Emissions Averaging

We asked for comments on including some type of averaging provisions, and several commenters recommended that averaging provisions be included in the final rule. We looked at existing rules that include averaging provisions such as the Petroleum Refineries NESHAP (subpart CC), the Aluminum Reduction Plants NESHAP (subpart LL), and the Group IV Polymers and Resins NESHAP (subpart JJJ) and found that these rules allow averaging only between emission sources covered under each specific rule. In reviewing the comments and considering different averaging options, there were several issues that had to be taken into account. First, in all previous regulations that implemented an averaging scheme, only processes within the same source category were considered and accounted for in the averaging scheme. In other words, the concept of emissions averaging has always been considered and implemented within a given source category, and not across source categories. Second, only existing sources have been allowed to take part in this type of flexibility option. This decision not to allow new sources to average their emissions is consistent with the direction outlined in

the statute where new sources are expected to reduce their emissions to a level equivalent to that of the best controlled similar source. Many facilities that operate engine test cells/stands also conduct other processes that emit HAP. However, these other processes, such as coating and cleaning, are not part of the engine test cells/stands source category and are already regulated under other NESHAP.

For these reasons, we concluded that averaging emissions is not an appropriate option for this source category. Therefore, the final rule includes no averaging provisions.

J. Miscellaneous

Some commenters recommended that the term engine test cell/stand be defined to clarify that a rotary test firing operation that holds numerous engines is considered a single engine test cell/stand. Changes to the definition of affected source in the final rule provides for the collection of all equipment and activities associated with engine test cells/stands, which would relieve the necessity for specific language regarding carousel testing setups.

It was also noted that the proposed regulation

wording regarding the initial notification requirement for new or reconstructed engine test cells/stands used for testing internal combustion (IC) engines with a rated power of less than 25 hp (19 kilowatts (kW)) was unclear and confusing. Additional language was added to those sections of the final rule dealing with initial notifications to clarify those requirements. Any new or reconstructed source testing IC engines with a rated power less than 25 hp must submit an initial notification, but do not have to comply with any of the other final rule requirements.

III. What are the final standards?

A. What is the source category?

The final rule covers four subcategories of engine test cells/stands located at major source facilities: (1) engine test cells/stands used for testing internal combustion engines with rated power of 25 hp (19 kW) or more, (2) engine test cells/stands used for testing internal combustion engines with rated power of less than 25 hp, (3) engine test cells/stands used for testing combustion turbine engines, and (4) engine test cells/stands used for testing rocket engines. The rated power criteria for distinguishing between the two

internal combustion engine subcategories is based on the largest engine (in terms of rated power) that is tested in the engine test cell/stand.

B. What is the affected source?

The final rule applies to each affected source, which is defined as the collection of all equipment and activities associated with engine test cells/stands used for testing uninstalled stationary or uninstalled mobile (motive) engines located at a major source of HAP emissions. An uninstalled engine is defined as an engine being tested in a test cell/stand that is not installed in, or an integrated part of, the final product. A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year.

Each new or reconstructed affected source used for testing internal combustion engines with a rated power of 25 hp (19 kW) or more that is located at a major source of HAP emissions must comply with the requirements in the final rule. New or reconstructed affected sources used for testing internal combustion engines with a rated

power of less than 25 hp (19 kW) are not required to comply with the emission limitations in the final rule, but are required to submit an Initial Notification upon startup of the test cells/stands.

New or reconstructed affected sources used for testing combustion turbine engines or rocket engines are not required to comply with the emission limitation or the recordkeeping or reporting requirements in the final rule.

Existing affected sources that are located at major sources of HAP emissions are not required to comply with the emission limitations or the recordkeeping or reporting requirements in the final rule.

The final rule also does not apply to engine test cells/stands that are located at area sources of HAP emissions. An area source is any source that is not a major source of HAP emissions.

C. What are the emission limits?

As the owner or operator of a new or reconstructed affected source used in whole or in part for testing internal combustion engines with rated power of 25 hp (19 kW) or more and located at a major source of HAP emissions, you must comply with one of the following two

emission limitations by [INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER] or upon startup if you start up your affected source after [INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]: (1) reduce CO or THC emissions in the exhaust from the new or reconstructed affected source to 20 parts per million by volume dry basis (ppmvd) or less, at 15 percent oxygen (O₂) content, or (2) reduce CO or THC emissions in the exhaust from the new or reconstructed affected source by 96 percent or more. Existing affected sources used in whole or in part for testing internal combustion engines with rated power of 25 hp (19 kW) or more and located at a major source of HAP emissions are not required to comply with the emission limitations.

Finally, as mentioned earlier, new or reconstructed affected sources used for testing internal combustion engines with a rated power of less than 25 hp (19 kW), new or reconstructed affected sources used for testing combustion turbine engines, and new or reconstructed affected sources used for testing rocket engines are not required to comply with either emission limitation. In addition, neither existing affected sources located at major sources of HAP emissions nor new, reconstructed, or

existing affected sources located at area sources of HAP emissions are required to comply with the emission limitations.

D. What are the initial compliance requirements?

The initial compliance requirements are different depending on whether you demonstrate compliance with the outlet concentration emission limitation or the percent reduction emission limitation. If you choose to comply with the outlet concentration emission limitation, you must conduct EPA Methods 3A and 10 of appendix A to 40 CFR part 60 for CO measurement or EPA Method 25A of appendix A to 40 CFR part 60 for THC measurement. The final rule also provides for an alternate test method (ASTM D 6522-00) for testing engines that burn natural gas as fuel. You must demonstrate that the outlet concentration of CO or THC emissions from the new or reconstructed affected source or emission control device is 20 ppmvd or less, corrected to 15 percent O₂ content, using the first 4-hour rolling average after a successful performance evaluation.

If you comply with the percent reduction emission limitation, you must conduct an initial performance test to determine the capture and control efficiencies of the

equipment and to establish operating limits to be achieved on a continuous basis. The performance test would have to be completed no later than 180 days after the compliance date for new or reconstructed affected sources. You must demonstrate that the reduction in CO or THC emissions is at least 96 percent using the first 4-hour rolling average after a successful performance evaluation. Your inlet and outlet measurements must be on a dry basis and corrected to 15 percent O₂ content.

If you use a capture system and add-on control device, you determine both the efficiency of the capture system and the emission reduction efficiency of the control device. To determine the capture efficiency, you either verify the presence of a potential to emit (PTE) using EPA Method 204 of 40 CFR part 51, appendix M, or use one of the protocols in 40 CFR 63.9320 of the final rule to measure capture efficiency. If you have a PTE and all engine testing occurs within the enclosure and you route all exhaust gases from the enclosure to a control device, then you assume 100 percent capture.

To determine the emission reduction efficiency of the control device, you conduct measurements of the inlet and outlet gas streams. The test would consist of three

runs, each run lasting at least 1 hour, using the following EPA Methods in 40 CFR part 60, appendix A:

- Method 1 or 1A for selection of the sampling sites;
- Method 2, 2A, 2C, 2D, 2F, or 2G to determine the gas volumetric flow rate;
- Method 3, 3A, or 3B for gas analysis to determine dry molecular weight;
- Method 4 to determine stack moisture; and
- Method 25 or 25A to determine organic volatile matter concentration. Alternatively, any other test method or data that have been validated according to the applicable procedures in Method 301 of 40 CFR part 63, appendix A, and approved by the Administrator could be used.

E. What are the continuous compliance requirements?

Several general continuous compliance requirements apply to affected sources required to comply with the applicable emission limitation. You are required to comply with the applicable emission limitation at all times, except during SSM of any control equipment and associated monitoring equipment related to the new or reconstructed affected source emissions. You must

operate and maintain your air pollution control equipment and monitoring equipment according to good air pollution control practices at all times. You must conduct monitoring at all times that the new or reconstructed affected source is in operation except during periods of malfunction of the monitoring equipment or necessary repairs and quality assurance or control activities, such as calibration drift checks.

For each new or reconstructed affected source operation on which you use a capture system and control device, the continuous parameter monitoring results for each month would affect your compliance determination. If the monitoring results indicate no deviations from the operating limits and there were no bypasses of the control device, you assume the capture system and control device are achieving the same percent emission reduction efficiency as during the most recent performance test in which compliance was demonstrated. If there are any deviations from the operating limits during the month or any bypasses of the control device, you account for them in the calculation of the monthly emissions by assuming the capture system and control device were achieving zero emission reduction during the periods of deviation.

Then, you determine the overall percent reduction of CO or THC emissions.

If you use an emission capture system and control device, the final rule would require you to achieve, on a continuous basis, the operating limits you establish during the performance test. If the continuous monitoring shows that the capture system and control device is operating outside the range of values established during the performance test, you have deviated from the established operating limits.

If you operate a capture system and control device that allow emissions to bypass the control device, you have to demonstrate that CO or THC emissions collected by the capture system are being routed to the control device by monitoring for potential bypass of the control device. You may choose from the following four monitoring procedures:

- Flow control position indicator to provide a record of whether the exhaust stream is directed to the control device;
- Car-seal or lock-and-key valve closures to secure the bypass line valve in the closed position when the control device is operating;

- Valve closure monitoring to ensure any bypass line valve or damper is closed when the control device is operating; or
- Automatic shutdown system to stop the engine test cell/stand operation when flow is diverted from the control device.

If the bypass monitoring procedures indicate that emissions are not routed to the control device, you have deviated from the emission limits.

To demonstrate continuous compliance with either the percent reduction or outlet concentration emission limitation using continuous parameter monitoring systems, you must continuously monitor and record the appropriate parameter, depending on the control device used. The operating parameter must not drop below the level established by the performance test in order to maintain the reduction in CO or THC emissions at or above 96 percent, or 20 ppmvd or less, corrected to 15 percent O₂ content, based on a rolling 4-hour average, averaged every hour.

To demonstrate continuous compliance with the outlet concentration emission limitation using CEMS, you must calibrate and operate your CEMS according to the

requirements in 40 CFR 63.8. You must continuously monitor and record the CO or THC and O₂ concentrations at the outlet of the engine test cell/stand or emission control device and calculate the CO or THC emission concentration for each hour. Then, the hourly CO or THC emission concentrations for each hour of the 4-hour compliance period are averaged together. The outlet CO or THC emission concentration must be 20 ppmvd or less, corrected to 15 percent O₂ content, based on the 4-hour rolling average, averaged every hour.

To demonstrate continuous compliance with the percent reduction emission limitation using CEMS, you must calibrate and operate your CEMS according to the requirements in 40 CFR 63.8. You must continuously monitor and record the CO or THC, and O₂ concentration before and after the emission control device and calculate the percent reduction in CO or THC emissions hourly. The reduction in CO or THC emissions must be 96 percent or more, based on the 4-hour rolling average, averaged every hour.

For monitoring approaches using CEMS, you must also follow procedure 1 of 40 CFR part 60, appendix F, to verify that the CEMS is working properly over time.

F. What are the notification, recordkeeping, and reporting requirements?

You must submit all applicable notifications listed in the NESHAP General Provisions (40 CFR part 63, subpart A), including an initial notification, notification of performance evaluation, and a notification of compliance status for each engine test cell/stand required to comply with the emission limitations.

You must submit an initial notification for each single or collection of new or reconstructed engine test cells/stands located at a major source of HAP emissions used for testing internal combustion engines with a rated power of less than 25 hp (19 kW).

You must record all of the data necessary to determine if you are in compliance with the applicable emission limitation. Your records must be in a form suitable and readily available for review. You must also keep each record for 5 years following the date of each occurrence, measurement, maintenance, report, or record. Records must remain on site for at least 2 years and then can be maintained off site for the remaining 3 years.

For each affected source, to comply with the applicable emission limitation you must submit a

compliance report semiannually. This report must contain the company name and address, a statement by a responsible official that the report is accurate, a statement of compliance, or documentation of any deviation from the requirements of the final rule during the reporting period.

IV. What are the environmental, energy, cost, and economic impacts?

A. What are the air impacts?

The final rule will reduce HAP emissions in the 5th year following promulgation by an estimated 59.5 megagrams per year (65.5 tpy).

B. What are the non-air health, environmental, and energy impacts?

Assuming that new or reconstructed affected sources will be controlled by regenerative thermal oxidizers (RTO), secondary air and energy impacts would result from fuel combustion needed to operate these control devices.

The RTO require electricity and the combustion of natural gas to operate and maintain operating temperatures. By-products of fuel combustion required to generate electricity and maintain RTO operating temperature include emission of CO, nitrogen oxides

(NO_x), sulfur dioxide (SO₂), and particulate matter less than 10 microns in diameter (PM₁₀). Assuming the electricity required for RTO operation is generated at coal-fired plants built since 1978 and using AP-42 emissions factors, generation of electricity required to operate RTO at an estimated 18 new facilities would result in the following increases in these air pollutants: CO, 3.45 tpy; NO_x, 8.15 tpy; SO₂, 4.15 tpy; and PM₁₀, 0.45 tpy.

Energy impacts include the consumption of electricity and natural gas needed to operate RTO. The estimated increase in electricity consumption from the operation of RTOs is 183,600 kilowatt-hour per year. Increased fuel energy consumption resulting from burning natural gas would be 1,790,000 million British thermal units per year. No significant secondary water or solid waste impacts would result from the operation of emission control devices.

There would also be a very small increase in fuel consumption expected resulting from back pressure caused by the emission control system.

C. What are the economic impacts?

Based on the cost of compliance data provided above,

the final rule is not expected to affect any of the existing sources in the industries that use engine test cells/stands, or test rocket engines. We estimate that 18 facilities will construct a total of 72 new engine test cells/stands at large engine research and development or production facilities in the next 5 years, requiring controls to be installed to comply with the final rule. Six of the estimated facilities (with 24 of the new engine test cells/stands) are anticipated to be built by auto, tractor, and diesel engine manufacturers, while 12 of the facilities (with 48 engine test cells/stands) are estimated to be built by military facilities. The total compliance cost to each facility, including control equipment and monitoring, inspection, recordkeeping and reporting costs, is estimated to be \$179,000 per year (1999\$). The auto, tractor, and diesel engine manufacturing firms that are expected to construct new engine test cells/stands are large multi-national firms; thus, the cost of compliance is insignificant in comparison to firm revenues. For example, the impact on each firm is less than 0.0004 percent of corporate revenues in 1999, or nearly zero in percentage terms. Likewise, the cost of compliance for military facilities

that may be affected is insignificant when compared to facility operating budgets. Therefore, the economic impacts associated with the final rule are considered to be negligible.

V. Statutory and Executive Order Reviews

A. Executive Order 12866, Regulatory Planning and Review

Under Executive Order 12866 (58 FR 5173, October 4, 1993), EPA must determine whether the regulatory action is "significant" and, therefore, subject to Office of Management and Budget (OMB) review and the requirements of the Executive order. The Executive order defines "significant regulatory action" as one that is likely to result in standards that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect, in a material way, the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of

entitlement, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive order.

Pursuant to the terms of Executive Order 12866, it has been determined that the final rule does not constitute a "significant regulatory action" because it does not meet any of the above criteria. Consequently, this action was not submitted to OMB for review under Executive Order 12866.

B. Paperwork Reduction Act

The information collection requirements in the final rule are being submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1967.01), and a copy may be obtained from Susan Auby by mail at Office of Environmental Information, Collection Strategies Division (MD-2822T), 1200 Pennsylvania Avenue, NW, Washington DC 20460, by e-mail at auby.susan@epa.gov, or by calling (202) 566-1672. A copy may also be downloaded from the Internet at <http://www.epa.gov/icr>. The information

requirements are not effective until OMB approves them.

The information requirements are based on notification, recordkeeping, and reporting requirements in the NESHAP General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators subject to national emission standards. These recordkeeping and reporting requirements are specifically authorized by section 114 of the CAA (42 U.S.C. 7414). All information submitted to EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made is safeguarded according to EPA policies set forth in 40 CFR part 2, subpart B.

The final rule requires maintenance inspections of the control devices but does not require any notifications or reports beyond those required by the General Provisions. The recordkeeping requirements involve only the specific information needed to determine compliance.

The monitoring, reporting, and recordkeeping burden for this collection (averaged over the first 5 years after the effective date of the standards) is estimated to be 4,800 labor hours per year at a total annual cost of \$221,000. This estimate includes a one-time (initial)

control device performance evaluation, annualized capital monitoring equipment costs, semiannual compliance reports, maintenance inspections, notifications, and recordkeeping. Total annual costs associated with the new source control and monitoring requirements over the period of the ICR are estimated at \$3.2 million.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purpose of collecting, validating, and verifying information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to respond to a collection of information; search existing data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor a collection of information, and a person is not required to respond to such a collection, unless the collection displays a currently valid OMB control number. The OMB control

numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA) 5 U.S.C. 601 et seq., generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the Agency certifies that the final rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations and small governmental jurisdictions.

For purposes of assessing the impacts of today's final rule on small entities, a small entity is defined as: (1) a small business whose parent company has either fewer than 500 employees if the business is involved in testing marine engines, or fewer than 1,000 employees if the business is involved in the testing of other types of engines (as defined by the Small Business Administration); (2) a small governmental jurisdiction that is a government of a city, county, town, school

district, or special district with a population of less than 50,000; or (3) a small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field. Based on the Small Business Administration definitions, there are no small entities affected by this NESHAP. Pursuant to the provisions of 5 U.S.C. 605(b), we hereby certify that the NESHAP, if promulgated, will not have a significant economic impact on a substantial number of small entities.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of

the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law.

Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation of why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that the final rule does not

contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in aggregate, or the private sector in any one year, nor does the final rule significantly or uniquely impact small governments, because it contains no requirements that apply to such governments or impose obligations upon them. Thus, the requirements of the UMRA do not apply to the final rule.

E. Executive Order 13132, Federalism

Executive Order 13132 (64 FR 43255, August 10, 1999) requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" are defined in the Executive order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

The final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national

government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. None of the affected facilities are owned or operated by State governments. Thus, the requirements of section 6 of the Executive Order 13132 do not apply to the final rule.

F. Executive Order 13175, Consultation and Coordination with Indian Tribal Governments

Executive Order 13175 (65 FR 67249, November 6, 2000) requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." The final rule does not have tribal implications, as specified in Executive Order 13175, because tribal governments do not own or operate any sources subject to the amendments. We know of one company that reported operating engine test cells/stands that are owned by an Indian tribal government. However, these test cells/stands are used for testing rocket engines. Although test cells/stands used for testing rocket engines are covered by the final rule, test cells/stands used for testing rocket engines are not required to meet any emission limitation, reporting, or

recordkeeping requirements. Thus, Executive Order 13175 does not apply to the final rule.

G. Executive Order 13045, Protection of Children from Environmental Health and Safety Risks

Executive Order 13045 applies to any rule that EPA determines (1) is "economically significant" as defined under Executive Order 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, EPA must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by EPA.

The EPA interprets Executive Order 13045 as applying only to regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Executive order has the potential to influence the regulation. The final rule is not subject to Executive Order 13045, because it is based on technology performance and not on health or safety risks.

H. Executive Order 13211, Actions that Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Public Law No. 104-113; 15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in their regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. The NTTAA directs EPA to provide Congress, through annual reports to the OMB, with explanations when an agency does not use available and applicable voluntary consensus standards.

The final rule involves technical standards. The EPA cites the following standards in the final rule: EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 10, 10B, 25, 25A, 204, 204B,C,D,E and Performance Specifications (PS) 3 and PS 4A. Consistent with the

NTTAA, EPA conducted searches to identify voluntary consensus standards in addition to these EPA methods/performance specifications. No applicable voluntary consensus standards were identified for EPA Methods 1A, 2A, 2D, 2F, 2G, 204, 204B through 204F, and PS 3 and PS 4A. The search and review results have been documented and are placed in the docket (No. OAR-2002-0040) for the final rule.

Two voluntary consensus standards were identified as acceptable alternatives to the EPA methods specified in the final rule. The voluntary consensus standard ASTM D6522-00, Standard Test Method for the Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers and Process Heaters Using Portable Analyzers is cited in the final rule as an acceptable alternative to EPA Methods 3A and 10 for identifying carbon monoxide and oxygen concentrations for the final rule when the fuel is natural gas.

The voluntary consensus standard ANSI/ASME PTC 19.10-1981, Part 10 Flue and Exhaust Gas Analyses, is cited in the final rule for its manual method for

measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas. This part of ANSI/ASME PTC 19.10-1981 is an acceptable alternative to Method 3B.

In addition to the voluntary consensus standards EPA cites in the final rule, the search for emissions measurement procedures identified 13 other voluntary consensus standards. The EPA determined that 11 of these 13 standards identified for measuring emissions of the HAP or surrogates subject to emission standards in the final rule were impractical alternatives to EPA test methods/performance specifications for the purposes of the final rule. Therefore, the EPA does not intend to adopt these standards. The reasons for the determinations of these 11 methods are discussed below.

The voluntary consensus standard ASTM D3154-00, Standard Method for Average Velocity in a Duct (Pitot Tube Method), is impractical as an alternative to EPA Methods 1, 2, 2C, 3, 3B, and 4 for the purposes of the final rule since the standard appears to lack in quality control and quality assurance requirements. Specifically, ASTM D3154-00 does not include the following: (1) proof that openings of standard pitot tube

have not plugged during the test; (2) if differential pressure gauges other than inclined manometers (e.g., magnehelic gauges) are used, their calibration must be checked after each test series; and (3) the frequency and validity range for calibration of the temperature sensors.

The voluntary consensus standard ASTM D3464-96 (2001), Standard Test Method Average Velocity in a Duct Using a Thermal Anemometer, is impractical as an alternative to EPA Method 2 for the purposes of the final rule primarily because applicability specifications are not clearly defined, e.g., range of gas composition, temperature limits. Also, the lack of supporting quality assurance data for the calibration procedures and specifications, and certain variability issues that are not adequately addressed by the standard limit EPA's ability to make a definitive comparison of the method in these areas.

The voluntary consensus standard ISO 10780:1994, Stationary Source Emissions-Measurement of Velocity and Volume Flowrate of Gas Streams in Ducts, is impractical as an alternative to EPA Method 2 in the final rule. The standard recommends the use of an L-shaped pitot, which

historically has not been recommended by EPA. The EPA specifies the S-type design, which has large openings that are less likely to plug up with dust.

The voluntary consensus standard, CAN/CSA Z223.2-M86(1986), Method for the Continuous Measurement of Oxygen, Carbon Dioxide, Carbon Monoxide, Sulphur Dioxide, and Oxides of Nitrogen in Enclosed Combustion Flue Gas Streams, is unacceptable as a substitute for EPA Method 3A since it does not include quantitative specifications for measurement system performance, most notably the calibration procedures and instrument performance characteristics. The instrument performance characteristics that are provided are nonmandatory and also do not provide the same level of quality assurance as the EPA methods. For example, the zero and span/calibration drift is only checked weekly, whereas the EPA methods requires drift checks after each run.

Two very similar standards, ASTM D5835-95, Standard Practice for Sampling Stationary Source Emissions for Automated Determination of Gas Concentration, and ISO 10396:1993, Stationary Source Emissions: Sampling for the Automated Determination of Gas Concentrations, are impractical alternatives to EPA Method 3A for the purposes of the final rule because they lack in detail

and quality assurance/quality control requirements. Specifically, these two standards do not include the following: (1) sensitivity of the method; (2) acceptable levels of analyzer calibration error; (3) acceptable levels of sampling system bias; (4) zero drift and calibration drift limits, time span, and required testing frequency; (5) a method to test the interference response of the analyzer; (6) procedures to determine the minimum sampling time per run and minimum measurement time; and (7) specifications for data recorders, in terms of resolution (all types) and recording intervals (digital and analog recorders, only).

The voluntary consensus standard ISO 12039:2001, Stationary Source Emissions--Determination of Carbon Monoxide, Carbon Dioxide, and Oxygen--Automated Methods, is not acceptable as an alternative to EPA Method 3A. This ISO standard is similar to EPA Method 3A, but is missing some key features. In terms of sampling, the hardware required by ISO 12039:2001 does not include a three-way calibration valve assembly or equivalent to block the sample gas flow while calibration gases are introduced. In its calibration procedures, ISO 12039:2001 only specifies a two-point calibration while

EPA Method 3A specifies a three-point calibration. Also, ISO 12039:2001 does not specify performance criteria for calibration error, calibration drift, or sampling system bias tests as in the EPA method, although checks of these quality control features are required by the ISO standard.

The standard, ASTM D3162 (1994) Standard Test Method for Carbon Monoxide in the Atmosphere (Continuous Measurement by Nondispersive Infrared Spectrometry), is impractical as an alternative to EPA Method 10 in the final rule because this ASTM standard, which is stated to be applicable in the range of 0.5-100 ppm CO, does not cover the range of EPA Method 10 (20-1,000 ppm CO) at the upper end (but states that it has a lower limit of sensitivity). Also, ASTM D3162 does not provide a procedure to remove carbon dioxide interference. Therefore, this ASTM standard is not appropriate for combustion source conditions. In terms of non-dispersive infrared instrument performance specifications, ASTM D3162 has much higher maximum allowable rise and fall times (5 minutes) than EPA Method 10 (which has 30 seconds).

The voluntary consensus standard CAN/CSA Z223.21-

M1978, Method for the Measurement of Carbon Monoxide: 3--
Method of Analysis by Non-Dispersive Infrared
Spectrometry, is not acceptable as an alternative to EPA
Method 10 because it is lacking in the following areas:
(1) sampling procedures; (2) procedures to correct for
the carbon dioxide concentration; (3) instructions to
correct the gas volume if CO₂ traps are used;
(4) specifications to certify the calibration gases are
within 2 percent of the target concentration; (5)
mandatory instrument performance characteristics (e.g.,
rise time, fall time, zero drift, span drift, precision);
(6) quantitative specification of the span value maximum
as compared to the measured value: the standard
specifies that the instruments should be compatible with
the concentration of gases to be measured, whereas EPA
Method 10 specifies that the instrument span value should
be no more than 1.5 times the source performance
standard.

Two voluntary consensus standards, EN 12619:1999
Stationary Source Emissions-Determination of the Mass
Concentration of Total Gaseous Organic Carbon at Low
Concentrations in Flue Gases - Continuous Flame
Ionization Detector Method, and ISO 14965:2000(E) Air

Quality-Determination of Total Nonmethane Organic Compounds – Cryogenic Preconcentration and Direct Flame Ionization Method, are impractical alternatives to EPA Method 25 and 25A for the purposes of the final rule because the standards do not apply to solvent process vapors in concentrations greater than 40 ppm (EN 12619) and 10 ppm carbon (ISO 14965). Methods whose upper limits are this low are too limited to be useful in measuring source emissions, which are expected to be much higher.

Two of the 13 voluntary consensus standards identified in this search were not available at the time the review was conducted for the purposes of the final rule because they are under development by a voluntary consensus body: ASME/BSR MFC 13M, Flow Measurement by Velocity Traverse, for EPA Method 2 (and possibly 1); and ASME/BSR MFC 12M, Flow in Closed Conduits Using Multiport Averaging Pitot Primary Flowmeters, for EPA Method 2.

Sections 63.9310, 63.9320, 63.9321 and 63.9322 to 40 CFR part 63, subpart P, list the EPA testing methods included in the regulation. Under 40 CFR 63.7(f) and 63.8(f) of subpart A of the General Provisions, a source may apply to EPA for permission to use alternative test

methods or alternative monitoring requirements in place of any of the EPA testing methods, performance specifications, or procedures.

J. Congressional Review Act

The Congressional Review Act (5 U.S.C. 801 et seq.), as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that, before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. The final rule is not a "major rule" as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

National Emission Standards for Hazardous Air Pollutants:
Engine Test Cells/Standards--Page 62 of 153

Dated:

Christine Todd Whitman,
Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of the Federal Regulations is amended as follows:

PART 63--[AMENDED]

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401, et seq.

Subpart A - [AMENDED]

2. Section 63.14 is amended by adding paragraph (b)(27) and revising paragraph (i)(3) to read as follows:

§63.14 Incorporation by reference.

* * * * *

(b) * * *

(27) ASTM D 6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, IBR approved for §63.9307(c)(2).

* * * * *

(i) * * *

(3) ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]", IBR

approved for §§63.865(b), 63.3360(e)(1)(iii),
 63.4166(a)(3), 63.4965(a)(3), 63.5160(d)(1)(iii),
 63.9307(c)(2), and 63.9323(a)(3).

* * * * *

3. Part 63 is amended by adding subpart P P P P P to
 read as follows:

**Subpart P P P P P – National Emission Standards for Hazardous
 Air Pollutants for Engine Test Cells/Standards**

WHAT THIS SUBPART COVERS

§63.9280 What is the purpose of subpart P P P P P?
 §63.9285 Am I subject to this subpart?
 §63.9290 What parts of my plant does this subpart cover?
 §63.9295 When do I have to comply with this subpart?

EMISSION LIMITATIONS

§63.9300 What emission limitation must I meet?
 §63.9301 What are my options for meeting the emission
 limits?
 §63.9302 What operating limits must I meet?

GENERAL COMPLIANCE REQUIREMENTS

§63.9305 What are my general requirements for complying
 with this subpart?
 §63.9306 What are my continuous parameter monitoring
 system (CPMS) installation, operation, and maintenance
 requirements?
 §63.9307 What are my continuous emissions monitoring
 system installation, operation, and maintenance
 requirements?

TESTING AND INITIAL COMPLIANCE REQUIREMENTS

- §63.9310 By what date must I conduct the initial compliance demonstrations?
- §63.9320 What procedures must I use?
- §63.9321 What are the general requirements for performance tests?
- §63.9322 How do I determine the emission capture system efficiency?
- §63.9323 How do I determine the add-on control device emission destruction or removal efficiency?
- §63.9324 How do I establish the emission capture system and add-on control device operating limits during the performance test?
- §63.9330 How do I demonstrate initial compliance with the emission limitation?

CONTINUOUS COMPLIANCE REQUIREMENTS

- §63.9335 How do I monitor and collect data to demonstrate continuous compliance?
- §63.9340 How do I demonstrate continuous compliance with the emission limitation?

NOTIFICATIONS, REPORTS, AND RECORDS

- §63.9345 What notifications must I submit and when?
- §63.9350 What reports must I submit and when?
- §63.9355 What records must I keep?
- §63.9360 In what form and how long must I keep my records?

OTHER REQUIREMENTS AND INFORMATION

- §63.9365 What parts of the General Provisions apply to me?
- §63.9370 Who implements and enforces this subpart?
- §63.9375 What definitions apply to this subpart?

TABLES TO SUBPART PPPPP OF PART 63

- Table 1 to Subpart PPPPP of Part 63. Emission Limitations
- Table 2 to Subpart PPPPP of Part 63. Operating Limits

Table 3 to Subpart P P P P P of Part 63. Requirements for Initial Compliance Demonstrations
Table 4 to Subpart P P P P P of Part 63. Initial Compliance with Emission Limitations
Table 5 to Subpart P P P P P of Part 63. Continuous Compliance with Emission Limitations
Table 6 to Subpart P P P P P of Part 63. Requirements for Reports
Table 7 to Subpart P P P P P of Part 63. Applicability of General Provisions to Subpart P P P P P

WHAT THIS SUBPART COVERS

§63.9280 What is the purpose of subpart P P P P P?

Subpart P P P P P establishes national emission standards for hazardous air pollutants (NESHAP) for engine test cells/stands located at major sources of hazardous air pollutants (HAP) emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations contained in this NESHAP.

§63.9285 Am I subject to this subpart?

You are subject to this subpart if you own or operate an engine test cell/stand that is located at a major source of HAP emissions.

(a) An engine test cell/stand is any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) engines.

(b) An uninstalled engine is an engine that is not

installed in, or an integrated part of, the final product.

(c) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year.

§63.9290 What parts of my plant does this subpart cover?

This subpart applies to each new, reconstructed, or existing affected source.

(a) Affected source. An affected source is the collection of all equipment and activities associated with engine test cells/stands used for testing uninstalled stationary or uninstalled mobile (motive) engines located at a major source of HAP emissions.

(1) Existing affected source. An affected source is existing if you commenced construction or reconstruction of the affected source on or before May 14, 2002. A change in ownership of an existing affected source does not make that affected source a new or reconstructed affected source.

(2) New affected source. An affected source is new if you commenced construction of the affected source

after May 14, 2002.

(3) Reconstructed affected source. An affected source is reconstructed if you meet the definition of reconstruction in §63.2 of subpart A of this part and reconstruction is commenced after May 14, 2002.

Changes made to an existing affected source primarily for the purpose of complying with revisions to engine testing requirements under 40 CFR parts 80, 86, 89, 90, 91, or 92 are not considered a modification or reconstruction. In addition, passive measurement and control instrumentation and electronics are not included as part of any affected source reconstruction evaluation.

(b) Existing affected sources do not have to meet the requirements of this subpart and of subpart A of this part.

(c) Any portion of a new or reconstructed affected source located at a major source that is used exclusively for testing internal combustion engines with rated power of less than 25 horsepower (hp) (19 kilowatts(kW)) does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.9345(b).

(d) Any portion of a new or reconstructed affected

source located at a major source that meets any of the criteria specified in paragraphs (d)(1) through (4) of this section does not have to meet the requirements of this subpart and of subpart A of this part.

(1) Any portion of the affected source used exclusively for testing combustion turbine engines.

(2) Any portion of the affected source used exclusively for testing rocket engines.

(3) Any portion of the affected source used in research and teaching activities at facilities that are not engaged in the development of engines or engine test services for commercial purposes.

(4) Any portion of the affected source operated to test or evaluate fuels (such as knock engines), transmissions, or electronics.

§63.9295 When do I have to comply with this subpart?

(a) Affected sources.

(1) If you start up your new or reconstructed affected source before [DATE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], you must comply with the emission limitations in this subpart no later than [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

(2) If you start up your new or reconstructed

affected source on or after [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], you must comply with the emission limitations in this subpart upon startup.

(b) Area sources that become major sources. If your new or reconstructed affected source is located at an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, your new or reconstructed affected source must be in compliance with this subpart when the area source becomes a major source.

(c) You must meet the notification requirements in §63.9345 and in 40 CFR part 63, subpart A.

EMISSION LIMITATIONS

§63.9300 What emission limitations must I meet?

For each new or reconstructed affected source that is used in whole or in part for testing internal combustion engines with rated power of 25 hp (19 kW) or more and that is located at a major source, you must comply with the emission limitations in Table 1 to this subpart. (Tables are found at the end of this subpart.)

§63.9301 What are my options for meeting the emission limits?

You may use either a continuous parameter monitoring

system (CPMS) or a continuous emission monitoring system (CEMS) to demonstrate compliance with the emission limitations. Continuous monitoring systems must meet the requirements in §63.9306 (CPMS) and §63.9307 (CEMS).

§63.9302 What operating limits must I meet?

(a) For any new or reconstructed affected source on which you use add-on controls, you must meet the operating limits specified in Table 2 to this subpart. These operating limits must be established during the performance test according to the requirements in §63.9324. You must meet the operating limits at all times after you establish them.

(b) If you use an add-on control device other than those listed in Table 2 to this subpart, or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under §63.8(f).

GENERAL COMPLIANCE REQUIREMENTS

§63.9305 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitation that applies to you at all times, except

during periods of startup, shutdown, or malfunction (SSM) of your control device or associated monitoring equipment.

(b) If you must comply with the emission limitation, you must operate and maintain your engine test cell/stand, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times.

(c) You must develop and implement a written SSM plan (SSMP) for emission control devices and associated monitoring equipment according to the provisions in §63.6(e)(3). The plan will apply only to emission control devices, and not to engine test cells/stands.

§63.9306 What are my continuous parameter monitoring system (CPMS) installation, operation, and maintenance requirements?

(a) General. You must install, operate, and maintain each CPMS specified in paragraphs (c) and (d) of this section according to paragraphs (a)(1) through (7) of this section. You must install, operate, and maintain each CPMS specified in paragraph (b) of this section according to paragraphs (a)(3) through (5) of this

section.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four equally spaced successive cycles of CPMS operation in 1 hour.

(2) You must determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.

(3) You must record the results of each inspection, calibration, and validation check of the CPMS.

(4) You must maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment.

(5) You must operate the CPMS and collect emission capture system and add-on control device parameter data at all times that an engine test cell/stand is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments).

(6) You must not use emission capture system or add-on control device parameter data recorded during

monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. You must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.

(7) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements.

(b) Capture system bypass line. You must meet the requirements of paragraphs (b)(1) and (2) of this section for each emission capture system that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.

(1) You must monitor or secure the valve or closure mechanism controlling the bypass line in a nondiverting position in such a way that the valve or closure

mechanism cannot be opened without creating a record that the valve was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the requirements specified in paragraphs (b)(1)(i) through (iv) of this section.

(i) Flow control position indicator. Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. The time of occurrence and flow control position must be recorded, as well as every time the flow direction is changed. The flow control position indicator must be installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere.

(ii) Car-seal or lock-and-key valve closures. Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. You must visually inspect the seal or closure mechanism at least once every month to ensure that the valve is

maintained in the closed position, and the emissions are not diverted away from the add-on control device to the atmosphere.

(iii) Valve closure monitoring. Ensure that any bypass line valve is in the closed (nondiverting) position through monitoring of valve position at least once every 15 minutes. You must inspect the monitoring system at least once every month to verify that the monitor will indicate valve position.

(iv) Automatic shutdown system. Use an automatic shutdown system in which the engine testing operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when an engine test cell/stand is operating. You must inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the engine test cell/stand in operation.

(2) If any bypass line is opened, you must include a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports required in §63.9350.

(c) Thermal oxidizers and catalytic oxidizers. If you are using a thermal oxidizer or catalytic oxidizer as

an add-on control device, you must comply with the requirements in paragraphs (c)(1) through (3) of this section.

(1) For a thermal oxidizer, install a gas temperature monitor in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurs.

(2) For a catalytic oxidizer, you must install a gas temperature monitor in the gas stream immediately before the catalyst bed, and if you established operating limits according to §63.9324(b)(1) and (2), also install a gas temperature monitor in the gas stream immediately after the catalyst bed.

(i) If you establish operating limits according to §63.9324(b)(1) and (2), then you must install the gas temperature monitors both upstream and downstream of the catalyst bed. The temperature monitors must be in the gas stream immediately before and after the catalyst bed to measure the temperature difference across the bed.

(ii) If you establish operating limits according to §63.9324(b)(3) and (4), then you must install a gas temperature monitor upstream of the catalyst bed. The temperature monitor must be in the gas stream immediately

before the catalyst bed to measure the temperature.

(3) For all thermal oxidizers and catalytic oxidizers, you must meet the requirements in paragraphs (a) and (c)(3)(i) through (vii) of this section for each gas temperature monitoring device.

(i) Locate the temperature sensor in a position that provides a representative temperature.

(ii) Use a temperature sensor with a measurement sensitivity of 4 degrees Fahrenheit or 0.75 percent of the temperature value, whichever is larger.

(iii) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(iv) If a gas temperature chart recorder is used, it must have a measurement sensitivity in the minor division of at least 20 degrees Fahrenheit.

(v) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owner's manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed near the process temperature sensor must yield a reading within 30 degrees Fahrenheit of the process temperature sensor reading.

(vi) Conduct calibration and validation checks anytime the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(vii) At least monthly, inspect components for integrity and electrical connections for continuity, oxidation, and galvanic corrosion.

(d) Emission capture systems. The capture system monitoring system must comply with the applicable requirements in paragraphs (d)(1) and (2) of this section.

(1) For each flow measurement device, you must meet the requirements in paragraphs (a) and (d)(1)(i) through (iv) of this section.

(i) Locate a flow sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device.

(ii) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(iii) Conduct a flow sensor calibration check at least semiannually.

(iv) At least monthly, inspect components for integrity, electrical connections for continuity, and mechanical connections for leakage.

(2) For each pressure drop measurement device, you must comply with the requirements in paragraphs (a) and (d)(2)(i) through (vi) of this section.

(i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across each opening you are monitoring.

(ii) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(iii) Check pressure tap pluggage daily.

(iv) Using an inclined manometer with a measurement sensitivity of 0.0002 inch water, check gauge calibration quarterly and transducer calibration monthly.

(v) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

(vi) At least monthly, inspect components for integrity, electrical connections for continuity, and mechanical connections for leakage.

§63.9307 What are my continuous emissions monitoring system installation, operation, and maintenance

requirements?

(a) You must install, operate, and maintain each CEMS to monitor carbon monoxide (CO) or total hydrocarbons (THC) and oxygen (O₂) at the outlet of the exhaust system of the engine test cell/stand or at the outlet of the emission control device.

(b) To comply with the CO or THC percent reduction emission limitation, you may install, operate, and maintain a CEMS to monitor CO or THC and O₂ at both the inlet and the outlet of the emission control device.

(c) To comply with either emission limitation, the CEMS must be installed and operated according to the requirements described in paragraphs (c)(1) through (4) of this section.

(1) You must install, operate, and maintain each CEMS according to the applicable Performance Specification (PS) of 40 CFR part 60, appendix B (PS-3 or PS-4A).

(2) You must conduct a performance evaluation of each CEMS according to the requirements in 40 CFR 63.8 and according to PS-3 of 40 CFR part 60, appendix B, using Reference Method 3A or 3B for the O₂ CEMS, and according to PS-4A of 40 CFR part 60, appendix B, using

Reference Method 10 or 10B for the CO CEMS. If the fuel used in the engines being tested is natural gas, you may use ASTM D 6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide and Oxygen Concentrations in Emissions from Natural Gas Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers (incorporated by reference, see §63.14). As an alternative to Method 3B, you may use ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]," (incorporated by reference, see §63.14).

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, each representing a different 15-minute period within the same hour, to have a valid hour of data.

(4) All CEMS data must be reduced as specified in §63.8(g)(2) and recorded as CO concentration in parts per million by volume, dry basis (ppmvd), corrected to 15 percent O₂ content.

(d) If you have CEMS that are subject to paragraph (a) or (b) of this section, you must properly maintain

and operate the monitors continuously according to the requirements described in paragraphs (d)(1) and (2) of this section.

(1) Proper Maintenance. You must maintain the monitoring equipment at all times that the engine test cell/stand is operating, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(2) Continued Operation. You must operate your CEMS according to paragraphs (2)(i) and (ii) of this section.

(i) You must conduct all monitoring in continuous operation at all times that the engine test cell/stand is operating, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration drift checks and required zero and high-level adjustments). Quality assurance or control activities must be performed according to procedure 1 of 40 CFR part 60, appendix F.

(ii) Data recorded during monitoring malfunctions, associated repairs, out-of-control periods, and required quality assurance or control activities must not be used

for purposes of calculating data averages. You must use all of the data collected from all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring equipment to provide valid data.

Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

TESTING AND INITIAL COMPLIANCE REQUIREMENTS

§63.9310 By what date must I conduct the initial compliance demonstrations?

You must conduct the initial compliance demonstrations that apply to you in Table 3 to this subpart within 180 calendar days after the compliance date that is specified for your new or reconstructed affected source in §63.9295 and according to the provisions in §63.7(a)(2).

§63.9320 What procedures must I use?

(a) You must conduct each initial compliance demonstration that applies to you in Table 3 to this

subpart.

(b) You must conduct an initial performance evaluation of each capture and control system according to §§63.9321, 63.9322, 63.9323 and 63.9324, and each CEMS according to the requirements in 40 CFR 63.8 and according to the applicable Performance Specification of 40 CFR part 60, appendix B (PS-3 or PS-4A).

(c) The initial demonstration of compliance with the carbon monoxide (CO) or total hydrocarbon (THC) concentration limitation consists of the first 4-hour rolling average CO or THC concentration recorded after completion of the CEMS performance evaluation. You must correct the CO or THC concentration at the outlet of the engine test cell/stand or the emission control device to a dry basis and to 15 percent O₂ content according to Equation 1 of this section:

$$C_c = C_{unc} \left(\frac{5.9}{(20.9 - \%O_{2d})} \right) \quad (\text{Eq. 1})$$

Where:

C_c = concentration of CO or THC, corrected to 15 percent oxygen, ppmvd
 C_{unc} = total uncorrected concentration of CO or THC, ppmvd
 $\%O_{2d}$ = concentration of oxygen measured in gas stream, dry basis, percent by volume.

(d) The initial demonstration of compliance with the CO or THC percent reduction emission limitation consists of the first 4-hour rolling average percent reduction in CO or THC recorded after completion of the performance evaluation of the capture/control system and/or CEMS. You must complete the actions described in paragraphs (d)(1) through (2) of this section.

(1) Correct the CO or THC concentrations at the inlet and outlet of the emission control device to a dry basis and to 15 percent O₂ content using Equation 1 of this section.

(2) Calculate the percent reduction in CO or THC using Equation 2 of this section:

$$R = \frac{C_i - C_o}{C_i} \times 100 \quad (\text{Eq. 2})$$

Where:

R = percent reduction in CO or THC
 C_i = corrected CO or THC concentration at inlet of the emission control device
 C_o = corrected CO or THC concentration at the outlet of the emission control device.

§63.9321 What are the general requirements for performance tests?

(a) You must conduct each performance test required by §63.9310 according to the requirements in §63.7(e)(1)

and under the conditions in this section unless you obtain a waiver of the performance test according to the provisions in §63.7(h).

(1) Representative engine testing conditions. You must conduct the performance test under representative operating conditions for the test cell/stand. Operations during periods of SSM, and during periods of nonoperation do not constitute representative conditions. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation.

(2) Representative emission capture system and add-on control device operating conditions. You must conduct the performance test when the emission capture system and add-on control device are operating at a representative flow rate, and the add-on control device is operating at a representative inlet concentration. You must record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.

(b) You must conduct each performance test of an emission capture system according to the requirements in

§63.9322. You must conduct each performance test of an add-on control device according to the requirements in §63.9323.

§63.9322 How do I determine the emission capture system efficiency?

You must use the procedures and test methods in this section to determine capture efficiency as part of the performance test required by §63.9310.

(a) Assuming 100 percent capture efficiency. You may assume the capture system efficiency is 100 percent if both conditions in paragraphs (a)(1) and (2) of this section are met:

(1) The capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a potential to emit (PTE) and directs all the exhaust gases from the enclosure to an add-on control device.

(2) All engine test operations creating exhaust gases for which the test is applicable are conducted within the capture system.

(b) Measuring capture efficiency. If the capture system does not meet the criteria in paragraphs (a)(1) and (2) of this section, then you must use one of the two protocols described in paragraphs (c) and (d) of this

section to measure capture efficiency. The capture efficiency measurements use total volatile hydrocarbon (TVH) capture efficiency as a surrogate for organic HAP capture efficiency. For the protocol in paragraph (c) of this section, the capture efficiency measurement must consist of three test runs. Each test run must be at least 3 hours in duration or the length of a production run, whichever is longer, up to 8 hours. For the purposes of this test, a production run means the time required for a single engine test to go from the beginning to the end.

(c) Gas-to-gas protocol using a temporary total enclosure or a building enclosure. The gas-to-gas protocol compares the mass of TVH emissions captured by the emission capture system to the mass of TVH emissions not captured. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (c)(1) through (5) of this section to measure emission capture system efficiency using the gas-to-gas protocol.

(1) Either use a building enclosure or construct an enclosure around the engine test cell/stand and all areas where emissions from the engine testing subsequently occur. The enclosure must meet the applicable definition

of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.

(2) Use Method 204B or 204C of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions captured by the emission capture system during each capture efficiency test run as measured at the inlet to the add-on control device. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) The sampling points for the Method 204B or 204C of appendix M to 40 CFR part 51 measurement must be upstream from the add-on control device and must represent total emissions routed from the capture system and entering the add-on control device.

(ii) If multiple emission streams from the capture system enter the add-on control device without a single common duct, then the emissions entering the add-on control device must be simultaneously measured in each duct, and the total emissions entering the add-on control device must be determined.

(3) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system;

they are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) Use Method 204D of appendix M to 40 CFR part 51 if the enclosure is a temporary total enclosure.

(ii) Use Method 204E of appendix M to 40 CFR part 51 if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the engine test cell/stand operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.

(4) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 1 of this section:

$$CE = \frac{TVH_{\text{captured}}}{(TVH_{\text{captured}} + TVH_{\text{uncaptured}})} \times 100 \quad (\text{Eq. 1})$$

Where:

CE = capture efficiency of the emission capture system vented to the add-on control device, percent

TVH_{captured} = total mass of TVH captured by the emission capture system as measured at the inlet to the add-on control device during the emission capture efficiency test run, kg, determined according to paragraph (c)(2) of this section
 $TVH_{\text{uncaptured}}$ = total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg, determined according to paragraph (c)(3) of this section.

(5) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.

(d) Alternative capture efficiency protocol. As an alternative to the procedure specified in paragraph (c) of this section, you may determine capture efficiency using any other capture efficiency protocol and test methods that satisfy the criteria of either the data quality objective or lower control limit approach as described in appendix A to subpart KK of this part.

§63.9323 How do I determine the add-on control device emission destruction or removal efficiency?

You must use the procedures and test methods in this section to determine the add-on control device emission destruction or removal efficiency as part of the performance test required by §63.9310. You must conduct

three test runs as specified in §63.7(e)(3), and each test run must last at least 1 hour.

(a) For all types of add-on control devices, use the test methods specified in paragraphs (a)(1) through (5) of this section.

(1) Use Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select sampling sites and velocity traverse points.

(2) Use Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.

(3) Use Method 3, 3A, or 3B of appendix A to 40 CFR part 60, as appropriate, for gas analysis to determine dry molecular weight. The ANSI/ASME PTC 19.10-1981 Part 10 is an acceptable alternative to Method 3B (incorporated by reference, see §63.14).

(4) Use Method 4 of appendix A to 40 CFR part 60, to determine stack gas moisture.

(5) Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run.

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control

device simultaneously, using either Method 25 or 25A of appendix A to 40 CFR part 60, as specified in paragraphs (b)(1) through (3) of this section. You must use the same method for both the inlet and outlet measurements.

(1) Use Method 25 of appendix A to 40 CFR part 60 if the add-on control device is an oxidizer, and you expect the total gaseous organic concentration as carbon to be more than 50 parts per million at the control device outlet.

(2) Use Method 25A of appendix A to 40 CFR part 60 if the add-on control device is an oxidizer, and you expect the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.

(c) For each test run, determine the total gaseous organic emissions mass flow rates for the inlet and the outlet of the add-on control device, using Equation 1 of this section. If there is more than one inlet or outlet to the add-on control device, you must calculate the total gaseous organic mass flow rate using Equation 1 of this section for each inlet and each outlet and then total all of the inlet emissions and total all of the outlet emissions.

$$M_f = Q_{sd}C_c(12)(0.0416)(10^{-6}) \quad (\text{Eq. 1})$$

Where:

M_f	=	total gaseous organic emissions mass flow rate, kg/hour (kg/h)
C_c	=	concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, parts per million by volume (ppmv), dry basis
Q_{sd}	=	volumetric flow rate of gases entering or exiting the add-on control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters/hour (dscm/h)
0.0416	=	conversion factor for molar volume, kg-moles per cubic meter (mol/m^3) (@ 293 Kelvin [K] and 760 millimeters of mercury [mmHg]).

(d) For each test run, determine the add-on control device organic emissions destruction or removal efficiency, using Equation 2 of this section:

$$\text{DRE} = 100 \times \frac{M_{fi} - M_{fo}}{M_{fi}} \quad (\text{Eq. 2})$$

Where:

DRE	=	organic emissions destruction or removal efficiency of the add-on control device, percent
M_{fi}	=	total gaseous organic emissions mass flow rate at the inlet(s) to the add-on control device, using Equation 1 of this section, kg/h
M_{fo}	=	total gaseous organic emissions mass flow rate at the outlet(s) of the add-on control device, using Equation 1 of this section, kg/h.

(e) Determine the emission destruction or removal efficiency of the add-on control device as the average of

the efficiencies determined in the three test runs and calculated in Equation 2 of this section.

§63.9324 How do I establish the emission capture system and add-on control device operating limits during the performance test?

During the performance test required by §63.9310, you must establish the operating limits required by §63.9302 according to this section, unless you have received approval for alternative monitoring and operating limits under §63.8(f) as specified in §63.9302.

(a) Thermal oxidizers. If your add-on control device is a thermal oxidizer, establish the operating limits according to paragraphs (a)(1) and (2) of this section.

(1) During the performance test, you must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. You must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.

(2) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This

average combustion temperature is the minimum operating limit for your thermal oxidizer.

(b) Catalytic oxidizers. If your add-on control device is a catalytic oxidizer, establish the operating limits according to either paragraphs (b)(1) and (2) or paragraphs (b)(3) and (4) of this section.

(1) During the performance test, you must monitor and record the temperature just before the catalyst bed and the temperature difference across the catalyst bed at least once every 15 minutes during each of the three test runs.

(2) Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. These are the minimum operating limits for your catalytic oxidizer.

(3) As an alternative to monitoring the temperature difference across the catalyst bed, you may monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (b)(4) of this section. During the performance test, you

must monitor and record the temperature just before the catalyst bed at least once every 15 minutes during each of the three test runs. Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer.

(4) You must develop and implement an inspection and maintenance plan for your catalytic oxidizer(s) for which you elect to monitor according to paragraph (b)(3) of this section. The plan must address, at a minimum, the elements specified in paragraphs (b)(4)(i) through (iii) of this section.

(i) Annual sampling and analysis of the catalyst activity (i.e, conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures.

(ii) Monthly inspection of the oxidizer system, including the burner assembly and fuel supply lines for problems and, as necessary, adjust the equipment to assure proper air-to-fuel mixtures.

(iii) Annual internal and monthly external visual inspection of the catalyst bed to check for channeling,

abrasion, and settling. If problems are found, you must take corrective action consistent with the manufacturer's recommendation and conduct a new performance test to determine destruction efficiency according to §63.9323.

(c) Emission capture system. For each capture device that is not part of a PTE that meets the criteria of §63.9322(a), establish an operating limit for either the gas volumetric flow rate or duct static pressure, as specified in paragraphs (c)(1) and (2) of this section. The operating limit for a PTE is specified in Table 3 to this subpart.

(1) During the capture efficiency determination required by §63.9310, you must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in your emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.

(2) Calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each capture device. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.

§63.9330 How do I demonstrate initial compliance with the emission limitation?

(a) You must demonstrate initial compliance with the emission limitation that applies to you according to Table 3 to this subpart.

(b) You must submit the Notification of Compliance Status containing results of the initial compliance demonstration according to the requirements in §63.9345(c).

CONTINUOUS COMPLIANCE REQUIREMENTS

§63.9335 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitor malfunctions, associated repairs, and required quality assurance or quality control activities (including, as applicable, calibration drift checks and required zero and high-level adjustments of the monitoring system), you must conduct all monitoring in continuous operation at all times the engine test cell/stand is operating.

(b) Do not use data recorded during monitor malfunctions, associated repairs, and required quality assurance or quality control activities for meeting the requirements of this subpart, including data averages and

calculations. You must use all the data collected during all other periods in assessing the performance of the emission control device or in assessing emissions from the new or reconstructed affected source.

§63.9340 How do I demonstrate continuous compliance with the emission limitations?

(a) You must demonstrate continuous compliance with the emission limitation in Table 1 to this subpart that applies to you according to methods specified in Table 5 to this subpart.

(b) You must report each instance in paragraphs (b)(1) and (2) of this section. These instances are deviations from the emission limitation in this subpart and must be reported according to the requirements in §63.9350.

(1) You must report each instance in which you did not meet the emission limitation that applies to you.

(2) You must report each instance in which you did not meet the requirements in Table 7 to this subpart that apply to you.

(c) Startups, shutdowns, and malfunctions. During periods of SSM of control device and associated monitoring equipment, you must operate in accordance with

your SSMP.

(1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of SSM of control devices and associated monitoring equipment are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the SSMP.

(2) The Administrator will determine whether deviations that occur during a period of SSM of control devices and associated monitoring equipment are violations, according to the provisions in §63.6(e).

NOTIFICATIONS, REPORTS, AND RECORDS

§63.9345 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.8(e), 63.8(f)(4) and (6), and 63.9(b), (g)(1), (g)(2) and (h) that apply to you by the dates specified.

(b) If you own or operate a new or reconstructed test cell/stand used for testing internal combustion engines, you are required to submit an Initial Notification as specified in paragraphs (b)(1) through (3) of this section.

(1) As specified in §63.9(b)(2), if you start up your new or reconstructed affected source before the

effective date of this subpart, you must submit an Initial Notification not later than 120 calendar days after [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

(2) As specified in §63.9(b), if you start up your new or reconstructed affected source on or after the effective date of this subpart, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.

(3) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.9290(c), your notification should include the information in §63.9(b)(2)(i) through (v) and a statement that your new or reconstructed affected source has no additional requirements and explain the basis of the exclusion (for example, that the affected source is used exclusively for testing internal combustion engines with rated power of less than 25 hp (19 kW)).

(c) If you are required to comply with the emission limitations in Table 1 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For each initial compliance

demonstration with the emission limitation, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

(d) You must submit a notification of initial performance evaluation of your CEMS or performance testing of your control device at least 60 calendar days before the performance testing/evaluation is scheduled to begin as required in §63.8(e)(2).

§63.9350 What reports must I submit and when?

(a) If you own or operate a new or reconstructed affected source that must meet the emission limitation, you must submit a semiannual compliance report according to Table 6 to this subpart by the applicable dates specified in paragraphs (a)(1) through (6), unless the Administrator has approved a different schedule.

(1) The first semiannual compliance report must cover the period beginning on the compliance date specified in §63.9295 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date specified in §63.9295.

(2) The first semiannual compliance report must be

postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified in §63.9295.

(3) Each subsequent semiannual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each new or reconstructed affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established the date for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (4) of this section.

(6) If you had an SSM of a control device or

associated monitoring equipment during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in paragraphs §63.10(d)(5)(i).

(b) If there is no deviation from the applicable emission limitation and the CEMS or CPMS was not out-of-control, according to §63.8(c)(7), the semiannual compliance report must contain the information described in paragraphs (b)(1) through (4) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) A statement that no deviation from the emission limit occurred during the reporting period and that no CEMS or CPMS was out-of-control, according to §63.8(c)(7).

(c) For each deviation from an emission limit, the semiannual compliance report must include the information in paragraphs (b)(1) through (3) of this section and the

information included in paragraphs (c)(1) through (4) of this section.

(1) The date and time that each deviation started and stopped.

(2) The total operating time of each new or reconstructed engine test cell/stand during the reporting period.

(3) A summary of the total duration of the deviation during the reporting period (recorded in 4-hour periods), and the total duration as a percent of the total operating time during that reporting period.

(4) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(d) For each CEMS or CPMS deviation, the semiannual compliance report must include the information in paragraphs (b)(1) through (3) of this section and the information included in paragraphs (d)(1) through (10) of this section.

(1) The date and time that each CEMS or CPMS was inoperative except for zero (low-level) and high-level checks.

(2) The date and time that each CEMS or CPMS was out-of-control including the information in §63.8(c)(8).

(3) A summary of the total duration of CEMS or CPMS downtime during the reporting period (reported in 4-hour periods), and the total duration of CEMS or CPMS downtime as a percent of the total engine test cell/stand operating time during that reporting period.

(4) A breakdown of the total duration of CEMS or CPMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes and other unknown causes.

(5) The monitoring equipment manufacturer(s) and model number(s) of each monitor.

(6) The date of the latest CEMS or CPMS certification or audit.

(7) The date and time period of each deviation from an operating limit in Table 2 to this subpart; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of SSM or during another period.

(8) A summary of the total duration of each

deviation from an operating limit in Table 2 to this subpart, each bypass of the add-on control device during the semiannual reporting period, and the total duration as a percent of the total source operating time during that semiannual reporting period.

(9) A breakdown of the total duration of the deviations from the operating limits in Table 2 to this subpart and bypasses of the add-on control device during the semiannual reporting period by identifying deviations due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(10) A description of any changes in CEMS, CPMS, or controls since the last reporting period.

(e) Immediate SSM report. If you had an SSM of a control device or associated monitoring equipment during the semiannual reporting period that was not consistent with your SSMP, you must submit an immediate SSM report according to the requirements in §63.10(d)(5)(ii).

§63.9355 What records must I keep?

(a) You must keep the records as described in paragraphs (a)(1) through (5) of this section.

(1) A copy of each notification and report that you

submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) Records of performance evaluations as required in §63.10(b)(2)(viii).

(3) Records of the occurrence and duration of each malfunction of the air pollution control equipment, if applicable, as required in §63.10(b)(2)(ii).

(4) Records of all maintenance on the air pollution control equipment, if applicable, as required in §63.10(b)(iii).

(5) The calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices.

(b) For each CPMS, you must keep the records as described in paragraphs (b)(1) through (7) of this section.

(1) For each deviation, a record of whether the deviation occurred during a period of SSM of the control device and associated monitoring equipment.

(2) The records in §63.6(e)(3)(iii) through (v) related to SSM.

(3) The records required to show continuous compliance with each operating limit specified in Table 2 to this subpart that applies to you.

(4) For each capture system that is a PTE, the data and documentation you used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent, as specified in §63.9322(a).

(5) For each capture system that is not a PTE, the data and documentation you used to determine capture efficiency according to the requirements specified in §§63.9321 and 63.9322(b) through (e), including the records specified in paragraphs (b)(5)(i) and (ii) of this section that apply to you.

(i) Records for a gas-to-gas protocol using a temporary total enclosure or a building enclosure. Records of the mass of TVH emissions captured by the emission capture system as measured by Method 204B or C of appendix M to 40 CFR part 51 at the inlet to the add-on control device, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure

or building enclosure during each capture efficiency test run as measured by Method 204D or E of appendix M to 40 CFR part 51, including a copy of the test report.

Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(ii) Records for an alternative protocol. Records needed to document a capture efficiency determination using an alternative method or protocol as specified in §63.9322(e), if applicable.

(6) The records specified in paragraphs (b)(6)(i) and (ii) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in §63.9323.

(i) Records of each add-on control device performance test conducted according to §§63.9321, 63.9322, and 63.9323.

(ii) Records of the engine testing conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions.

(7) Records of the data and calculations you used

to establish the emission capture and add-on control device operating limits as specified in §63.9324 and to document compliance with the operating limits as specified in Table 2 to this subpart.

(c) For each CEMS, you must keep the records as described in paragraphs (c)(1) through (4) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (i.e., superceded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Request for alternatives to the relative accuracy test for CEMS as required in §63.8(f)(6)(i), if applicable.

(4) The records in §63.6(e)(3)(iii) through (v) related to SSM of the control device and associated monitoring equipment.

(d) You must keep the records required in Table 5 to this subpart to show continuous compliance with each emission limitation that applies to you.

§63.9360 In what form and how long must I keep my records?

(a) You must maintain all applicable records in

such a manner that they can be readily accessed and are suitable for inspection according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each records for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must retain your records of the most recent 2 years on site, or your records must be accessible on site. Your records of the remaining 3 years may be retained off site.

OTHER REQUIREMENTS AND INFORMATION

§63.9365 What parts of the General Provisions apply to me?

Table 7 to this subpart shows which parts of the General Provisions in §§63.1 through 13 apply to you.

§63.9370 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional

Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under section 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are described in paragraphs (1) through (4) of this section.

(1) Approval of alternatives to the emission limitations in §63.9300 under §63.6(g).

(2) Approval of major changes to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major changes to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major changes to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§63.9375 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA; in 40 CFR 63.2, the General Provisions of this part; and

in this section:

CAA means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Public Law 101-549, 104 Statute 2399).

Area source means any stationary source of HAP that is not a major source as defined in this part.

Combustion turbine engine means a device in which air is compressed in a compressor, enters a combustion chamber, and is compressed further by the combustion of fuel injected into the combustion chamber. The hot compressed combustion gases then expand over a series of curved vanes or blades arranged on a central spindle that rotates.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitations;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation in this

subpart during malfunction, regardless of whether or not such failure is permitted by this subpart.

Engine means any internal combustion engine, any combustion turbine engine, or any rocket engine.

Engine Test Cell/Stand means any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) engines.

Hazardous Air Pollutant (HAP) means any air pollutant listed in or pursuant to section 112(b) of the CAA.

Internal combustion engine means a device in which air enters a combustion chamber, is mixed with fuel, compressed in the chamber, and combusted. Fuel may enter the combustion chamber with the air or be injected into the combustion chamber. Expansion of the hot combustion gases in the chamber rotates a shaft, either through a reciprocating or rotary action. For purposes of this subpart, this definition does not include combustion turbine engines.

Major source, as used in this subpart, shall have the same meaning as in §63.2.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control

equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Rated power means the maximum power output of an engine in use.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

Responsible official means responsible official as defined by 40 CFR 70.2.

Rocket engine means a device consisting of a combustion chamber in which materials referred to as propellants, which provide both the fuel and the oxygen for combustion, are burned. Combustion gases escape through a nozzle, providing thrust.

Uninstalled engine means an engine not installed in, or an integrated part of, the final product.

TABLES TO SUBPART PPPPP OF PART 63

Table 1 to Subpart PPPPP of Part 63. Emission

Limitations

For each new or reconstructed affected source located at a major source facility that is used in whole or in part for testing ...	You must meet one of the following emission limitations:
1. internal combustion engines with rated power of 25 hp (19 kW) or more	a. limit the concentration of CO or THC to 20 ppmvd or less (corrected to 15 percent O ₂ content); or b. achieve a reduction in CO or THC of 96 percent or more between the inlet and outlet concentrations (corrected to 15 percent O ₂ content) of the emission control device

Table 2 to Subpart PPPPP of Part 63. Operating Limits

For the following device...	you must meet the following operating limit...	and you must demonstrate continuous compliance with the operating limit by...
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1. thermal oxidizer	a. the average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to §63.9324(a).	i. collecting the combustion temperature data according to §63.9306(c); ii. reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average combustion temperature at or above the temperature limit.
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2. catalytic oxidizer	a. the average temperature measured just before the catalyst bed in any 3-hour period must not fall below the limit established according to §63.9324(b).	i. collecting the temperature data according to §63.9306(c); ii. reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average temperature before the catalyst bed at or above the temperature limit.
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b. either ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to §63.9324(b)(2) or develop and implement an inspection and maintenance plan according to §63.9324(b)(3) and (4).

i. either collecting the temperature data according to §63.9306(c), reducing the data to 3-hour block averages, and maintaining the 3-hour average temperature difference at or above the temperature difference limit; or

ii. complying with the inspection and maintenance plan developed according to §63.9324(b)(3) and (4).

3. emission capture system that is a PTE according to §63.9322(a)	a. the direction of the air flow at all times must be into the enclosure; and either	i. collecting the direction of air flow; and either the facial velocity of air through all natural draft openings according to §63.9306(d)(1) or the pressure drop across the enclosure according to §63.9306(d)(2); and ii. maintaining the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times.
	b. the average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or	Follow the requirements in 3ai and ii of this table.
	c. the pressure drop across the enclosure must be at least 0.007 inch H ₂ O, as established in Method 204 of appendix M to 40 CFR part 51.	Follow the requirements in 3ai and ii of this table.

4. emission capture system that is not a PTE according to §63.9322(a)	a. the average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to §63.9306(d).	i. collecting the gas volumetric flow rate or duct static pressure for each capture device according to §63.9306(d); ii. reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limit.
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Table 3 to Subpart P of Part 63. Requirements for Initial Compliance Demonstrations

For each new or reconstructed affected source complying with...				according to the following requirements...
with...	you must...	using...		
1. the CO or THC outlet concentration emission limitation	a. demonstrate CO or THC emissions are 20 ppmvd or less.	i. EPA Methods 3A and 10 of appendix A to 40 CFR part 60 for CO measurement or EPA Method 25A of appendix A to 40 CFR part 60 for THC measurement; OR		You must demonstrate that the outlet concentration of CO or THC emissions from the test cell/stand or emission control device is 20 ppmvd or less, corrected to 15 percent O ₂ content, using the first 4-hour rolling average after a successful performance evaluation.

ii. a CEMS for CO or THC and O₂ at the outlet of the engine test cell/stand or emission control device.

This demonstration is conducted immediately following a successful performance evaluation of the CEMS as required in §63.9320(b). The demonstration consists of the first 4-hour rolling average of measurements. The CO or THC concentration must be corrected to 15 percent O₂ content, dry basis using Equation 1 in §63.9320.

2. the CO or THC percent reduction emission limitation	a. demonstrate a reduction in CO or THC of 96 percent or more.	i. you must conduct an initial performance test to determine the capture and control efficiencies of the equipment and to establish operating limits to be achieved on a continuous basis; OR	You must demonstrate that the reduction in CO or THC emissions is at least 96 percent using the first 4- hour rolling average after a successful performance evaluation. Your inlet and outlet measurements must be on a dry basis and corrected to 15 percent O ₂ content.
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ii. a CEMS for CO or THC and O ₂ at both the inlet and outlet of the emission control device	This demonstration is conducted immediately following a successful performance evaluation of the CEMS as required in §63.9320(b). The demonstration consists of the first 4-hour rolling average of measurements. The inlet and outlet CO or THC concentrations must be corrected to 15 percent O ₂ content using Equation 1 in §63.9320. The reduction in CO or THC is calculated using Equation 2 in §63.9320.
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Table 4 to Subpart P of Part 63. Initial Compliance with Emission Limitations

For the...	you have demonstrated initial compliance if...
1. CO or THC concentration emission limitation	the first 4-hour rolling average CO or THC concentration is 20 ppmvd or less, corrected to 15 percent O ₂ content.

2. CO or THC percent reduction emission limitation	the first 4-hour rolling average reduction in CO or THC is 96 percent or more, dry basis, corrected to 15 percent O ₂ content.
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**Table 5 to Subpart P of Part 63. Continuous
Compliance with Emission Limitations**

For the...	you must...	by...
1. CO or THC concentration emission limitation	a. demonstrate CO or THC emissions are 20 ppmvd or less over each 4- hour rolling averaging period.	i. collecting the CPMS data according to §63.9306(a), reducing the measurements to 1- hour averages;
		OR ii. collecting the CEMS data according to §63.9307(a), reducing the measurements to 1- hour averages, correcting them to 15 percent O ₂ content, dry basis, according to §63.9320;
2. CO or THC percent reduction emission limitation	a. demonstrate a reduction in CO or THC of 96 percent or more over each 4-hour rolling averaging period.	i. collecting the CPMS data according to §63.9306(a), reducing the measurements to 1- hour averages;
		OR

ii. collecting the CEMS data according to §63.9307(b), reducing the measurements to 1-hour averages, correcting them to 15 percent O₂ content, dry basis, calculating the CO or THC percent reduction according to §63.9320.

Table 6 to Subpart P of Part 63. Requirements for Reports

If you own or operate a new or reconstructed affected source that must comply with emission limitations, you must submit a...

the report must contain...

you must submit the report...

1. compliance
report

a. If there are no deviations from the emission limitations that apply to you, a statement that there were no deviations from the emission limitations during the reporting period. semiannually, according to the requirements in §63.9350.

b. If there were no periods during which the CEMS or CPMS were out of control as specified in §63.8(c)(7), a statement that there were no periods during which the CEMS or CPMS was out of control during the reporting period. semiannually, according to the requirements in §63.9350.

c. If you have a deviation from any emission limitation during the reporting period, the report must contain the information in §63.9350(c). semiannually, according to the requirements in §63.9350.

d. If there were periods during which the CEMS or CPMS were out of control, as specified in §63.8(c)(7), the report must contain the information in §63.9350(d). semiannually, according to the requirements in §63.9350.

e. If you had an SSM semiannually,
of a control device according to
or associated the
monitoring equipment requirements
during the reporting in §63.9350.
period, the report
must include the
information in
§63.10(d)(5)(i).

Table 7 to Subpart P PPPP of Part 63. Applicability of General Provisions to Subpart P PPPP

Citation	Subject	Brief Description	Applies to Subpart P PPPP
§63.1(a) Applicability (1)		General applicability of the General Provisions	Yes. Additional terms defined in §63.9375.
§63.1(a) Applicability (2)-(4)		Applicability of source categories	Yes.
§63.1(a) [Reserved] (5)			
§63.1(a) Applicability (6)-(7)		Contact for source category information; extension of compliance through early reduction	Yes.
§63.1(a) Applicability (8)		Establishment of State rules or programs	No. Refers to State programs.
§63.1(a) [Reserved] (9)			
§63.1(a) Applicability (10)-(14)		Explanation of time periods, postmark deadlines	Yes.
§63.1(b) Applicability (1)		Initial applicability	Yes. Subpart P PPPP clarifies applicability at §63.9285.

§63.1(b) Applicability (2)	Title V operating permit-reference to part 70	Yes. All major affected sources are required to obtain a Title V permit.
§63.1(b) Applicability (3)	Record of applicability determination	Yes.
§63.1(c) Applicability (1)	Applicability after standards are set	Yes. Subpart PPPPP clarifies the applicability of each paragraph of subpart A to sources subject to subpart PPPPP.
§63.1(c) Applicability (2)	Title V permit requirement for area sources	No. Area sources are not subject to subpart PPPPP.
§63.1(c) [Reserved] (3)		
§63.1(c) Applicability (4)	Extension of compliance for existing sources	No. Existing sources are not covered by the substantive control requirements of subpart PPPPP.
§63.1(c) Applicability (5)	Notification requirements for an area source becoming a major source	Yes.
§63.1(d) [Reserved]		

§63.1(e)	Applicability	Applicability of permit program before a relevant standard has been set	Yes.
§63.2	Definitions	Definitions for Part 63 standards	Yes. Additional definitions are specified in §63.9375.
§63.3	Units and Abbreviations	Units and abbreviations for Part 63 standards	Yes.
§63.4	Prohibited Activities	Prohibited activities; compliance date; circumvention, severability	Yes.
§63.5(a)	Construction/Reconstruction	Construction and reconstruction—applicability	Yes.
§63.5(b)(1)	Construction/Reconstruction	Requirements upon construction or reconstruction	Yes.
§63.5(b)(2)	[Reserved]		
§63.5(b)(3)	Construction/Reconstruction	Approval of construction	Yes.
§63.5(b)(4)	Construction/Reconstruction	Notification of construction	Yes.
§63.5(b)(5)	Construction/Reconstruction	Compliance	Yes.
§63.5(b)(6)	Construction/Reconstruction	Addition of equipment	Yes.
§63.5(c)	[Reserved]		

§63.5(d)	Construction/ Reconstruction	Application for construction reconstruction	Yes.
§63.5(e)	Construction/ Reconstruction	Approval of construction or reconstruction	Yes.
§63.5(f)	Construction/ Reconstruction	Approval of construction or reconstruction based on prior State review	Yes.
§63.6(a)	Applicability	Applicability of standards and monitoring requirements	Yes.
§63.6(b) (1)-(2)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for 112(f)	Yes.
§63.6(b) (3)	Compliance Dates for New and Reconstructed Sources	Compliance dates for sources constructed or reconstructed before effective date	No. Compliance is required by startup or effective date.
§63.6(b) (4)	Compliance Dates for New and Reconstructed Sources	Compliance dates for sources also subject to §112(f) standards	Yes.

§63.6(b) (5)	Compliance Dates for New and Reconstructed Sources	Notification	Yes.
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§63.6(b) (6)	[Reserved]		
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§63.6(b) (7)	Compliance Dates for New and Reconstructed Sources	Compliance dates for new and reconstructed area sources that become major	Yes.
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§63.6(c) (1)-(2)	Compliance Dates for Existing Sources	Effective date establishes compliance date	No. Existing sources are not covered by the substantive control requirements of subpart P P P P P.
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§63.6(c) (3)-(4)	[Reserved]		
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§63.6(c) (5)	Compliance Dates for Existing Sources	Compliance dates for existing area sources that become major	Yes. If the area source becomes a major source by addition or reconstruction, the added or reconstructed portion will be subject to subpart P P P P P.
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§63.6(d)	[Reserved]		

§63.6(e) (1) - (2)	Operation and Maintenance Requirements	Operation and maintenance	Yes. Except that you are not required to have an SSMP for control devices and associated monitoring equipment.
§63.6(e) (3)	SSMP	1. Requirement for SSM and SSMP 2. Content of SSMP	Yes. You must develop an SSMP for each control device and associated monitoring equipment.
§63.6(f) (1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM of control devices or associated monitoring equipment	Yes, but you must comply with emission standards at all times except during SSM of control devices and associated monitoring equipment only.
§63.6(f) (2)-(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g) (1)-(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.

§63.6(h) Opacity/Visible Emission (VE) Standards	Requirements for opacity/VE standards	No. Subpart P P P P P does not establish opacity/VE standards and does not require continuous opacity monitoring systems (COMS).
§63.6(i) Compliance (1)-(14) Extension	Procedures and criteria for Administrator to grant compliance extension	No. Compliance extension provisions apply to existing sources, which do not have emission limitations in subpart P P P P P.
§63.6(j) Presidential Compliance Exemption	President may exempt source category from requirement to comply with rule	Yes.
§63.7(a) Performance (1)-(2) Test Dates	Dates for conducting initial performance testing and other compliance demonstrations: Must conduct within 180 days after first subject to rule	Yes.

§63.7(a) (3)	Section 114 Authority	Administrator may require a performance test under CAA Section 114 at any time	Yes.
§63.7(b) (1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§63.7(b) (2)	Notification of Rescheduling	If have to reschedule performance test, must notify Administrator 5 days before scheduled date of rescheduled date	Yes.
§63.7(c)	Quality Assurance/Test Plan	1. Requirement to submit site- specific test plan 60 days before the test or on date Administrator agrees with	Yes.
		2. Test plan approval procedures	Yes.
		3. Performance audit requirements	Yes.
		4. Internal and external QA procedures for testing	Yes.

§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
§63.7(e) (1)	Conditions for Conducting Performance Tests	Performance tests must be conducted under representative conditions; cannot conduct performance tests during SSM; not a violation to exceed standard during SSM	Yes.
§63.7(e) (2)	Conditions for Conducting Performance Tests	Must conduct according to rule and EPA test methods unless Administrator approves alternative	Yes.
§63.7(e) (3)	Test Run Duration	1. Must have three test runs of at least 1 hour each	Yes.
		2. Compliance is based on arithmetic mean of three runs	Yes.
		3. Conditions when data from an additional test run can be used	Yes.

§63.7(e) (4)	Other Performance Testing	Administrator may require other testing under section 114 of the CAA	Yes
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an alternative test method	Yes.
§63.7(g)	Performance Test Data Analysis	1. Must include raw data in performance test report 2. Must submit performance test data 60 days after end of test with the Notification of Compliance Status 3. Keep data for 5 years	Yes. Yes.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§63.8(a) (1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes. Subpart PPPPP contains specific requirements for monitoring at §63.9325.
§63.8(a) (2)	Performance Specifications	Performance Specifications in appendix B of part 60 apply	Yes.

§63.8(a) [Reserved]
(3)

§63.8(a) Monitoring with (4) Flares Unless your rule No. Subpart says otherwise, PPPPP does not the requirements have monitoring for flares in requirements 63.11 apply for flares.

§63.8(b) Monitoring (1) Must conduct Yes.
monitoring
according to
standard unless
Administrator
approves
alternative

§63.8(b) (2)-(3)	Multiple Effluents and Multiple Monitoring Systems	1. Specific requirements for installing monitoring systems	Yes.
		2. Must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise	Yes.
		3. If more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	Yes.
§63.8(c) (1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	Yes.

§63.8(c) (1)(i)	Routine and Predictable CMS Malfunctions	1. Follow the SSMP for routine repairs of CMS	Yes.
		2. Keep parts for routine repairs of CMS readily available	Yes.
		3. Reporting requirements for SSM when action is described in SSMP	Yes.
§63.8(c) (1)(ii)	SSM of CMS Not in SSMP	Reporting requirements for SSM of CMS when action is not described in SSMP	Yes.
§63.8(c) (1)(iii)	Compliance with Operation and Maintenance Requirements	1. How Administrator determines if source complying with operation and maintenance requirements	Yes.
		2. Review of source O&M procedures, records, manufacturer's instructions and recommendations, and inspection	

§63.8(c) (2)-(3)	Monitoring System Installation	1. Must install to get representative emission of parameter measurements	Yes.
		2. Must verify operational status before or at performance test	Yes.
§63.8(c) (4)	Continuous Monitoring System (CMS) Requirements	1. CMS must be operating except during breakdown, out of control, repair, maintenance, and high-level calibration drifts	No. Follow specific requirements in §63.9335(a) and (b) of subpart PPPPP.
		2. COMS must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period	No. Follow specific requirements in §63.9335(a) and (b) of subpart PPPPP.
		3. CEMS must have a minimum of one cycle of operation for each successive 15-minute period	No. Follow specific requirements in §63.9335(a) and (b) of subpart PPPPP.

§63.8(c) (5)	COMS Minimum Procedures	COMS minimum procedures	No. Subpart PPPPP does not have opacity/ VE standards.
§63.8(c) (6)-(8)	CMS Requirements	Zero and high- level calibration check requirements, out-of-control periods	Yes. Except that PPPPP does not require COMS.
§63.8(d)	CMS Quality Control	1. Requirements for CMS quality control, including calibration, etc.	Yes.
		2. Must keep quality control plan on record for 5 years. Keep old versions for 5 years after revisions	Yes.
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	Yes. Except for §63.8(e)(5) (ii), which applies to COMS.
§63.8(f) (1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	Yes.

§63.8(f) (6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for CEMS	Yes.
§63.8(g)	Data Reduction	1. COMS 6-minute averages calculated over at least 36 evenly spaced data points 2. CEMS 1-hour averages computed over at least 4 equally spaced data points	Yes. Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §63.9340.
§63.8(g) (5)	Data Reduction	Data that cannot be used in computing averages for CEMS and COMS	No. Specific language is located at §63.9335(a).
§63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§63.9(b) (1)-(5)	Initial Notifications	1. Submit notification subject 120 days after effective date	Yes.

		2. Notification of intent to construct/reconstruct; notification of commencement of construct/reconstruct; notification of startup	Yes.
		3. Contents of each	Yes.
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed BACT/LAER	No. Compliance extensions do not apply to new or reconstructed sources.
§63.9(d)	Notification of Special Compliance Requirements for New Source	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	No. Subpart PPPPP does not require performance testing.
§63.9(f)	Notification of Opacity/VE Test	Notify Administrator 30 days prior	No. Subpart PPPPP does not have opacity/VE standards.
§63.9(g)(1)	Additional Notifications when Using CMS	Notification of performance evaluation	Yes.

§63.9(g) (2)	Additional Notifications when Using CMS	Notification of use of COMS data	No. Subpart PPPPP does not contain opacity or VE standards.
§63.9(g) (3)	Additional Notifications when Using CMS	Notification that exceeded criterion for relative accuracy	Yes. If alternative is in use.
§63.9(h) (1)-(6)	Notification of Compliance Status	1. Contents 2. Due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after 3. When to submit to Federal vs. State authority	Yes. Yes. Yes.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change in when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§63.10 (a)	Recordkeeping/ Reporting	1. Applies to all, unless compliance extension	Yes.

		2. When to submit to Federal vs. State authority	Yes.
		3. Procedures for owners of more than one source	Yes.
§63.10 (b)(1)	Recordkeeping/ Reporting	1. General requirements	Yes.
		2. Keep all records readily available	Yes.
		3. Keep for 5 years	Yes.
§63.10 (b)(2) (i)-(v)	Records Related to SSM	1. Occurrence of each of operation (process equipment)	Yes.
		2. Occurrence of each malfunction of air pollution equipment	Yes.
		3. Maintenance on air pollution control equipment	Yes.
		4. Actions during SSM	Yes.
		5. All information necessary to demonstrate conformance with the SSMP	Yes.

§63.10 (b)(2) (vi)- (xi)	CMS Records	Malfunctions, inoperative, out of control	Yes.
§63.10 (b)(2) (xii)	Records	Records when under waiver	Yes.
§63.10 (b)(2) (xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§63.10 (b)(2) (xiv)	Records	All documentation supporting initial notification and notification of compliance status	Yes.
§63.10 (b)(3)	Records	Applicability determinations	Yes.
§63.10 (c)(1)- (6), (9)-(15)	Records	Additional records for CEMS	Yes.
§63.10 (c)(7)- (8)	Records	Records of excess emissions and parameter monitoring exceedances for CMS	No. Specific language is located at §63.9355 of subpart P P P P P.
§63.10 (d)(1)	General Reporting Requirements	Requirement to report	Yes.
§63.10 (d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.

§63.10 (d)(3)	Reporting Opacity or VE Observations	What to report and when	No. Subpart PPPPP does not have opacity/VE standards.
§63.10 (d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	No. Compliance extensions do not apply to new or reconstructed sources.
§63.10 (d)(5)	SSM Reports	Contents and submission	Yes.
§63.10 (e)(1) and (2)(i)	Additional CMS Reports	Additional CMS reports	Yes.
§63.10 (e)(2) (ii)	Additional CMS Reports	COMS-related report	No. Subpart PPPPP does not require COMS.
§63.10 (e)(3)	Additional CMS Reports	Excess emissions and parameter exceedances reports	No. Specific language is located in §63.9350 of subpart PPPPP.
§63.10 (e)(4)	Additional CMS Reports	Reporting COMS data	No. Subpart PPPPP does not require COMS.
§63.10 (f)	Waiver for Recordkeeping/ Reporting	Procedures for Administrator to waive	Yes.
§63.11	Control Device Requirements	Requirements for flares	No. Subpart PPPPP does not specify use of flares for compliance.
§63.12	State Authority and Delegations	State authority to enforce standards	Yes.

§63.13	Addresses of State Air Pollution Control Offices and EPA Regional Offices	Addresses where reports, notifications, and requests are sent	Yes.
§63.14	Incorporations by Reference	Test methods incorporated by reference	Yes. ASTM D 6522-00 and ANSI/ASME PTC 19.10-1981 (incorporated by reference- See §63.14).
§63.15	Availability of Information and Confidentiality	Public and confidential information	Yes.